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ABSTRACT

This collection of speeches and essays concerns various viewpoints on the subject of adult education research. The first paper, Lifelong Learning: Problems in Research (Apps), examines the viewpoint that the majority of research as now practiced is not consistent with the major assumptions in the field of adult education. The next essay, Participatory Research: Should It Be a New Methodology for Adult Educators? (Griffith and Cristarella), answers several questions about participatory research: (1) What is participatory research? (2) How does it compare with established methodologies? and (3) Should all adult educators be taught to carry out such research? The third paper, Participatory Research: Breaking the Academic Monopoly (Hall), also deals with the concept of participatory research, especially with its future directions. Next, Boshier presents a conceptual and methodological perspective concerning research on participation in adult education. Finally, Boyd re-examines basic conceptualizations of learning for the older adult learner. Each paper includes bibliographies concerning the author's subject matter. (CT)

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Information Series No. 171

VIEWPOINTS ON ADULT EDUCATION RESEARCH

edited by

John A. Niemi
Northern Illinois University

The ERIC Clearinghouse on Adult, Career, and Vocational Education
The National Center for Research in Vocational Education
The Ohio State University
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Columbus, Ohio 43210

1979

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NATIONAL INSTITUTE OF EDUCATION

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FOREWORD

The Educational Resources Information Center on Adult, Career, and Vocational Education (ERIC/CE) is one of sixteen clearinghouses in a nationwide information system that is funded by the National Institute of Education. One of the functions of the Clearinghouse is to interpret the literature that is entered in the ERIC data base. This paper should be of particular interest to a broad array of adult educators, including those in leadership positions, teachers, researchers, and those in training at the graduate level.

The profession is indebted to John A. Niemi for his effort in the preparation of this paper. Recognition also is due Gordon Darkenwald, Rutgers University; and Patricia Winkfield, the National Center for Research in Vocational Education, for their critical review of the manuscript prior to its final revision and publication. Robert D. Bhaerman, Assistant Director for Career Education and Dr. J. Nevin Robbins, Assistant Director for Adult Education at the ERIC Clearinghouse on Adult, Career, and Vocational Education, coordinated the publication's development. Cathy Thompson assisted in the editing of the manuscript and Bonna Somerlott and Cody Donaldson typed the final draft.

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ABSTRACT

This collection of speeches and essays concerns various viewpoints on the subject of adult education research. The first paper, Lifelong Learning: Problems in Research (Apps), examines the viewpoint that the majority of research as now practiced is not consistent with the major assumptions in the field of adult education. The next essay, Participatory Research: Should It Be a New Methodology for Adult Educators? (Griffith and Cristarella), answers several questions about participatory research: (1) What is participatory research? (2) How does it compare with established methodologies? and (3) Should all adult educators be taught to carry out such research? The third paper, Participatory Research: Breaking the Academic Monopoly (Hall), also deals with the concept of participatory research, especially with its future directions. Next, Boshier presents a conceptual and methodological perspective concerning research on participation in adult education. Finally, Boyd re-examines basic conceptualizations of learning for the older adult learner. Each paper includes bibliographies concerning the author's subject matter. (CT)

DESC::*Adult Education; *Continuous Learning; *Older Adults; *Research Projects; Educational Research; Opinions

IDEN::*Participatory Research

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University of Wisconsin at Madison

INTRODUCTION

A combination of social forces is making the public aware of the needs of adult learners. Accordingly, increasing numbers of individuals are moving into the field of adult education as a career choice. The purpose of this paper is to present viewpoints on research by outstanding American and Canadian adult educators to those who are preparing for the field by means of graduate work or independent study. On the basis that research should guide practice, this paper also is intended for those already engaged as administrators, counselors, professors, researchers, and teachers. Its value for persons in such related fields as gerontology and social work also should not be ignored.

The monograph contains five papers based on a series of lectures delivered to graduate students and faculty at Northern Illinois University between 1976 and 1979. It begins with an essay by Jerold W. Apps, who offers a preview of some ideas developed more fully in his new book, *Problems in Continuing Education* (published by McGraw-Hill in 1979). His essay focuses on the problem that "the majority of adult education research as now practiced is not consistent with assumptions of the field of adult education." Apps begins by suggesting nine reasons why the field is dependent on the scientific method. He then examines several assumptions of science and contrasts them with some assumptions of adult education. On the basis of contradictions between the two sets, Apps suggests that adult education research should be broadened to include three basic research approaches: scientific, intuitive, and rationalistic (deductive reasoning).

William S. Griffith and Mary C. Cristarella present a critical review of the literature on participatory research in adult education. According to their point of view, a new false dichotomy has reared its head -- participatory research *versus* traditional research. While granting the argument advanced by proponents of participatory research against the negative

value of poorly conducted social science research, they counter that it is wrong to condemn a methodology because some researchers use it ineptly. In turn, they challenge the principles and processes of participatory research by suggesting that it lacks precision and clarity. In their view, it would be more appropriately treated as a contribution to community development.

This challenge to participatory research has not gone unanswered. Budd Hall begins his paper by questioning that aspect of the present structure for the production of knowledge whereby "some people's common sense becomes recognized as philosophy and other people's does not." After suggesting that the production of knowledge is effectively a commodity, he moves into a comparison of participatory research and typical survey approaches and addresses the criticisms of Griffith and Cristarella and certain Tanzanian sources. He concludes with a discussion of the thinking behind the concept of partipatory research and with themes for elaboration and exploration.

Roger Boshier forecasts that the conduct of significant participation research will assume increasing importance to policy-makers and practitioners. He questions the need for more descriptive clientele surveys and believes that the time has come to reduce emphasis on *ex post facto* research on participation and to turn to the development of theoretical model(s) derived inductively through experiment. For needed *ex post facto* research on participation, Boshier suggests "multi-variate approaches sensitive to variable interactions and ecological foundations of participation behavior."

Robert Boyd calls for the re-examination of basic conceptualizations of learning as they affect the older learner. He begins by exploring three positions taken by adult educators on aging: decrement thesis, retention thesis, and adult cognitive stage development. Concerning the latter, Boyd envisions three main streams within human life: exploration of the physical world, confronting and dealing with power, and the spiritual dimension of life. Each stream forms a basis for a conceptual framework which, in turn, forms a basis for a theory of congitive development.

In conclusion, I wish to express deep appreciation to the authors who so willingly accepted the invitation extended by the NIU Graduate Colloquim Committee and the Adult and

Continuing Program area within the Department of Leadership and Educational Policy Studies. Financial support for the lectures came from funds derived from graduate student fees. I also want to thank several colleagues for their encouragement of this effort: Dr. James T. King, Associate Dean of Graduate Studies; Dr. Robert C. Mason, Area Chairperson of Graduate Studies in Adult and Continuing Education; and Dr. Keith R. Getschman, Chairperson of the Department of Ledership and Educational Policy Studies. Finally, as always, I am indebted to my wife, Dr. Muriel Tomkins Niemi, for her editorial skill.

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LIFELONG LEARNING: PROBLEMS IN RESEARCH

Jerold W. Apps

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University of Wisconsin at Madison

Interest in lifelong learning continues to grow. The idea that people can and do learn from birth to death has wide appeal. But with any relatively new area, the research necessary to describe and improve the activity lags far behind the activity itself. Such is the case with research in lifelong learning.

For the purposes of this paper, I would like to focus on that part of lifelong learning which is concerned with the adult learner.[1] Many of my comments do not have application to lifelong learning for children and young people. But because my training and interest lie in adult education, it is in that context that I will frame my remarks.

I could discuss a great many problems that affect research in adult education: the pitifully inadequate monetary support from both the public and the private sector; the woefully inadequate number of persons who are actually doing research as a major part of their professions; the many small, independent projects being carried out that have little relationship to each other or to larger efforts; determining research priorities, with a seemingly large number of efforts concerned with counting who is participating in what kind of activity, with little attention given to such basic problems as the effect of poverty on learning, the nature of adult learning, and so on; the lack of attention by researchers to the development of adult education theory; the confusion that continues to separate those who are doing so-called "applied" research and those who are doing so-called "basic" research. I might spend some time discussing why I believe graduate programs generally do an inadequate job of preparing persons to be researchers. Finally, I could explore the

problem as to why so few persons in the field are interested in research as something satisfying and exciting to do.

However, I wish to concentrate on the most fundamental problem of all, namely, that *the majority of research as now practiced is not consistent with the major assumptions in the field of adult education.* I will describe what I see as the predominant research approach in adult education and why that approach is predominant. In order to illustrate contradictions, I will attempt to contrast the assumptions of that approach with some assumptions of adult education. Finally, I will comment on what I believe to be a satisfactory approach to solving this problem.

THE PREDOMINANT ADULT EDUCATION RESEARCH APPROACH

The predominant research approach in adult education is science; that is, most researchers in the field work toward following the scientific method in the carrying out of their research. I define science as an approach to obtaining knowledge based on general principles about phenomena derived from empirical or sense observation. The scientific method is the process of building a body of scientific knowledge through observation, experimentation, generalization, and verification.

Some years ago, when I began examining this problem, I had a feeling that something was wrong with how we went about doing research or, at least, tried to do adult education research. It did not seem to me that there was any alternative to science. When I mentioned this concern to several peers, the answers I usually received went something like this: "Our science in adult education needs much refinement, much improvement, but eventually, if we continue to work at it, we will be able to perfect it." It did not occur to me then -- and it did not occur to those with whom I shared my concerns -- that science itself was one of the problems. More important, it did not occur to me then that any alternative approaches to research existed beyond science itself. It also did not occur to me that science is only one approach for doing research in adult education.

As I reflected upon why the adult education field is so dependent on science as its sole approach to research, I came up with at least nine reasons:

1. The training of those who are supposed to do adult education research -- and of those who are supposed to train others to do it -- is almost entirely related to how to do *scientific* research. Even the methodology books often used in adult education research methods courses do not recognize an alternative to scientific research. Hillway (1969) states, "When we use the term *educational research*, we mean the scientific investigation and solution of education's problems. To the extent that education may be called a science, we are able to employ research as a means of measuring, analyzing, and accurately describing its characteristics" (p. 3). Fox (1969) stated something similar: "All the methods used in modern research are based upon a general approach to human problems commonly referred to as the scientific method or scientific inquiry" (p. 3).

2. Many adult education researchers are not aware that it is possible to do research other than *scientific* research as science and research are synonymous to them. Some who are aware of other approaches discount them as unimportant, irrelevant, or even detrimental to moving research forward in adult education.

3. Graduate students in adult education who might wish to explore an alternative approach in their graduate projects often face a flurry of objections from their committees. Professors responsible for guiding graduate students' research discourage the use of approaches other than the scientific method for many of the reasons already cited.

4. Little information is available as to how one might do other types of research because so little work has been done to explore approaches as alternatives to the scientific research approach.

5. As a field, adult education tends to associate itself with social sciences and/or the behavioral sciences.

Because of this association, many researchers believe that it is necessary to emphasize *scientific research*. Their reasoning stipulates that if the field *is* a science, researchers in that field should conduct scientific research.

6. As a research approach, science over the years has developed a methodology that has served many disciplines well. It has moved forward such disciplines as chemistry, physics, genetics, and biochemistry far beyond what most people expected. If science has been the vehicle to move those disciplines forward with such great success, many adult education researchers reason that science will provide the same assistance to them.

7. Science has contributed directly to solving many problems that people face, e.g., health, nutrition, transportation, communication, and recreation. Thus, it is generally seen as something "good" by those who have responsibility for committing public and private dollars. Parenthetically, it should be said that science also has created many problems: environmental pollution, deteriorating interpersonal relationships, and the preoccupation with the accumulation of material goods. On balance, however, most decision-makers believe that science is much more "good" than "evil." With this reality, adult education must focus on scientific research to compete for private and tax dollars.

8. A pragmatic reason for scientific research (with its heavy emphasis on measurement and the resultant numbers) is the use of numbers themselves. Numbers are relatively easy to communicate. When someone writes that "five things happened," it is not difficult for the reader to understand exactly how many things occurred. Also, because of their discrete nature and lack of ambiguity, numbers can be manipulated by computers to provide highly sophisticated outcomes. This manipulation can be accomplished in a fraction of the time it took scientists a generation ago to attempt the same analyses.

9. Few researchers in adult education believe that the assumptions of science are consistent with the

assumptions of adult education -- and, hence, that the problem I cited above does not exist.

ASSUMPTIONS OF SCIENCE AND ADULT EDUCATION

Let us examine several assumptions of science and contrast them with the assumptions of the field of adult education:

1. Science assumes that events and objects may be broken into discrete parts and that it is possible to study them in isolation. Furthermore, science assumes that what is learned when studying those discrete parts may be added together to provide an understanding of the whole from which the parts originally were derived.

   Adult education as a field of study is concerned with adult human beings. Within the field, most educators view adults holistically, that is, they have both a rational or thoughtful dimension and a feeling or emotional dimension. The rational dimension is constantly interacting with the feeling dimension. Adults also have physiological, psychological, social, and cultural dimensions. These dimensions cannot be viewed in isolation from each other or from adults to whom they relate. All of these dimensions are viewed by most adult educators as components of the totality of the adult. As long as the researcher is constantly aware of the relationship of the dimension being researched to other dimensions and to the total human being, it is possible to focus research attention on one of these dimensions at a time.

2. Science assumes that objects and events in the world possess many likenesses. Hence, events can be classified according to their essential properties, functions, and structures. Most adult educators assume that an adult is individual and unique and at the same time different from all others and that he or she shares some characteristics with all other humans. Thus, it is possible to classify such characteristics of adults as age, sex, place of residence, years of formal education, and so on. However, not everything about adults may be classified in this manner. Each adult,

for example, has a world view that uniquely belongs to him or her. Each personality is uniquely different from that of any other adult. Physically no two adults are alike. From a learning perspective, no two adults learn in exactly the same manner. No two adults have the same dreams, aspirations, fears, or hopes.

3. Science assumes that phenomena that occur today are determined by events that occurred previously. Hence, scientists search for causes of observed events. Most scientists do not believe that cause and event are absolute. As a result, they deal with probabilities and, for example, state that there is a ninety-five percent probability that event "A" caused phenomenon "B" to occur.

   Within the field of adult education, adults are assumed to be at the same time both free and determined. Their culture and social situation determines who and what they are. Yet, they are said to be free to act independently of social and cultural influences in determining who they are and what they are. It is, therefore, impossible to predict all of human behavior based on past occurrences.

4. Science assumes that direct observation and empiricism are the primary ways by which knowledge is obtained; that is, the scientist puts heavy emphasis on direct observation of events and objects.

   It is impossible to observe directly what has occurred in the past. Yet, adult education recognizes the importance of the history of the field in furnishing insights for understanding the field as it is today and making suggestions for the policies and practices of tomorrow.

   The adult education researcher also is interested in many aspects of the adult that are not directly observable, e.g., preferences, motives, dreams.

5. Science assumes that the subject researched is an object for study and that the object does not participate in the research. Scientists attempt to be apart from that which is researched, studying it (if you will) from a distance.

The field of adult education assumes that the adult is a partner in the practice of adult education, involved in the identification of needs, the determination of teaching-learning approaches, and the evaluation of learning outcomes. It follows that the adult also is a partner in the research that concerns him or her. A fundamental assumption held by many within the field is that the adult has the ability to understand the meaning of the situations in which he or she lives and to communicate that meaning. According to this line of reasoning, the adult should be an equal partner in the research process. The researchers and the adult work together on a research problem that has been identified with considerable input from the adult. Budd Hall (1975), director of research for the International Council for Adult Education, has developed this argument in some depth.

6. Science assumes that it (research) is objective and, for the most part, value-free. Scientific research is not concerned about the "goodness" or "badness" of situations but, instead, with describing situations as they exist and predicting what might occur. Many argue that this is an erroneous assumption, that science is not and cannot be objective or value-free. However, I do not intend to delve deeply into that argument here.

   Adult education researchers are fundamentally concerned with values. They are concerned with the development of theory and practice that serve to improve policy and practice. They are not content only to describe or predict. Researchers in adult education are not content with making statements such as given "A," "B" is likely to occur. Adult educators are concerned about the nature and value of "B."

IMPLICATIONS

If we accept the existence of contradictions between the assumptions of science and adult education, where does that leave us in regard to adult education research? How can we carry out our research so that it is consistent with the assumptions of science?

Let me start with what probably will be seen as a rather radical statement: the field of adult education is only partially a science. If the field is viewed totally as science, the assumptions of science must undergird all of its research.

What we in adult education research must do is conduct scientific research -- but we must go beyond science. In conducting our research, knowledge may be obtained from deductive reasoning, empirical research, and intuition. Scientific research often is viewed as some combination of deductive reasoning (rationalism) with empiricism. It is possible, however, to derive new knowledge by only following deductive reasoning or only observing (empiricism). Adult education researchers should seek to interrelate approaches that provide deductive, empirical, *and* intuitive knowledge.

Let us briefly explore each of these approaches as they might apply to adult education.

SCIENCE (RATIONAL-EMPIRICAL RESEARCH)

We already have explored the assumptions of science and have indicated that the results of scientific investigation have an empirical origin. The process of scientific investigation is known to most persons who have studied research methodology. Generally, scientific investigation relates to John Dewey's framework (1933) of problem-obstacle-idea, hypothesis, reasoning-deduction, and observation-test-experiment forming the process. There are many texts that explain how each of these phases are carried out. Some writers identify the phases differently and have more phases than those indicated here. Nevertheless, there is general agreement about what constitutes the scientific method.

INTUITIVE RESEARCH

Intuitive research is much more controversial. Indeed, many may not include it as a legitimate research approach.

The assumption of intuitive research is that intuition is a legitimate knowledge source and that such knowledge is of value. Intuition is that knowledge sometimes referred to as insight. It often is considered to be the outcome of creative activity and frequently is described as the activity of combining existing ideas, factors, and concepts in new ways. It also is described as *gestalts*, whole situations, where previously a situation had been perceived as a conglomerate of supposedly dissimilar objects. How the process operates is not well-known, but it is generally believed to be outside the area of conscious awareness. (See Royce, 1964.)

I suggest three ways of carrying out intuitive research. First, intuitive knowledge may be obtained by studying carefully the creative outputs of novelists, poets, and playwrights. At this point, other artists such as musicians, painters, dancers, and actors are excluded because the expression of their creativity -- their intuitive knowledge -- comes not in words but through other symbols.

McKenzie (1975) has done some interesting preliminary work in suggesting an approach for the analysis of literature to derive intuitive knowledge from the work of novelists. He has been interested particularly in adult human development. When he goes to a novel with the intent of obtaining intuitive knowledge about adult human development, he would ask such questions as these: "When precisely in the story did the character emerge from childhood? What events or situational forces influenced the growth of the character toward maturity? What was the learning style of the character early in his life, as compared with later in his life? What events or situational forces contributed to a change of learning style? Can the character's growth be charted according to well-defined stages? What are these stages?" (p. 214).

Secondly, intuitive knowledge may be obtained by providing situations and encouraging our creative juices to flow, to tap our own intuitive knowledge. Bruner (1964) suggested several conditions necessary for creative activity. Two of them are detachment/commitment and passion/decorum. Detachment and commitment suggest that persons must divorce themselves from the obvious ways of thinking about a

problem or situation but, at the same time, maintain an attitude of deep caring and the motivation to continue searching for an answer. Passion and decorum also must occur together. Passion characterizes persons who are completely caught up in some activity or problem. They are emotionally involved and excited about what they are doing. But this passion must be accompanied by decorum. It refers to the need for persons to recognize the importance of form, structure, and definition of words -- ways of making sense out of their excitement. Passion releases; decorum confines.

A third approach to doing intuitive research involves processes the researcher may use in obtaining intuitive knowledge from persons who are the subjects of research. Several persons have suggested approaches to this type of research. Grounded theory research is explained by Glaser and Strauss (1967). Participant observations are described by Bruyn (1966). The annotated bibiliography developed by Ohliger and Niemi (1975) explains in some detail approaches that may be used to obtain intuitive knowledge from persons. Also, the recent emphasis on phenomenology, which is receiving close attention at the present time, relates to obtaining intuitive knowledge.[2]

In summary, there are three ways to do intuitive research: obtain intuitive knowledge from the work of artists; obtain it from our own creative acts; obtain it from those who are the subjects of our research.

RATIONALISTIC (DEDUCTIVE REASONING) RESEARCH

Four approaches may be followed in doing rationalistic research: analytic, evaluative, speculative, and integrative. These may be thought of as levels, with integrative the highest one.

When following the analytic approach, we are concerned with the research problem itself. We explore the problem and attempt to determine the implied assumptions behind it. We search for the source of the problem and attempt to identify sub-problems that may lie within it. We search for the meaning of statements in the problem statement, the

relationship of statements to each other, and the logical basis for statements.

The evaluative approach involves the act of criticism of policy and practice. This approach is preceded by the analytic approach and builds on it. The results are statements of judgment that speak to the extent to which certain adult education policies and practices meet criteria. One dimension of this approach is the development of criteria that can be used as a basis of judgment.

The speculative approach builds on both the analytic and evaluative approaches that precede it. The speculative approach is concerned with creating new hypotheses and developing new approaches for the practice of adult education. This approach often results in normative statements about the direction for adult education policy and practice.

The integrative approach results in a total view of adult education and is preceded by and builds on the analytic, evaluative, and speculative approaches.[3] A researcher following this approach attempts to determine, for example, the nature of the adult as a learner, the nature and aims of the teaching-learning process, the nature and aims of adult education agencies and institutions, and the nature and aims of the adult educator. Following the integrated approach, the researcher eventually will develop what is sometimes referred to as a philosophy of adult education.

SUMMARY

I have tried to analyze one major problem that adult education research faces, namely, that the majority of adult education research, as now practiced, is not consistent with the assumptions of the field of adult education. I have attempted to show how the assumptions of science, which is the predominant approach in adult education research, are inconsistent with the assumptions of the field of adult education. I also have explained briefly why I believe adult education has been overly influenced by the scientific approach. Finally, I have suggested that adult education research should be broadened to include three basic research approaches: scientific, intuitive, and rationalistic.

Many questions obviously remain. The most significant one is this: How do we carry out research in these three areas, and what procedures might be used? This is a question that researchers in adult education will have to address. Other questions are these: What are the relationships among the three approaches suggested? Must all three approaches be followed at the same time? How do the data obtained from the three approaches relate to each other? It would seem possible to take data obtained from following the rationalistic or intuitive approaches and verify them through the scientific approach. But, *is* it possible to think of the three kinds of knowledge obtained from scientific, intuitive, and rationalistic research as having equal importance? These questions suggest that much more work needs to be done in this area.

NOTES

1. For a more indepth discussion of several of these issues, see Apps, J. W., *Problems in Continuing Education*. New York: McGraw-Hill Book Company, 1979, Chapters 13 and 14.

2. Phenomenology refers to an approach that attempts to suspend the biases and judgments of the observer and to describe faithfully the phenomena involved in the behavior of the individual, emphasizing perception and consciousness. See Chamberlin, J. G. *Toward a Phenomenology of Education*. Philadelphia: The Westminster Press, 1969; and Wann, T.W., Ed. *Behaviorism and Phenomenology*. Chicago: University of Chicago Press, 1964.

3. See Apps, J. W. *Toward a Working Philosophy of Adult Education*. Syracuse: Syracuse University, 1973; and Apps, J.W. "A Foundation for Action," in Klevins, C., Ed. *Materials and Methods in Continuing Education*. Canoga Park, California: Klevens Publications, Inc., 1976.

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PARTICIPATORY RESEARCH: SHOULD IT BE A NEW METHODOLOGY FOR ADULT EDUCATORS?

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Participatory research is a term which has been appearing during the past several years at international adult education conferences. Some commentators believe it has the potential of redirecting research in adult education. The International Conference on Adult Education and Development, held in Dar es Salaam in June, 1976, proposed that "all adult educators should receive training in the theory and practice of participatory research as well as in complementary quantitative research techniques" (Dar es Salaam Design for Action, 1976, p. 32). The UNESCO program action plan for 1977-1982 includes the support of future participatory research (Hurly, 1976). Cain (1977) stated that "the forces producing the demand for something called 'participatory research' are numerous and compelling" (p. 7).

THE PARTICIPATORY RESEARCH PROJECT

The network which is responsible for the coordination and promotion of participatory research in adult education throughout the world is the Participatory Research Project centered in Toronto. This network arose within the International Council for Adult Education (ICAE) in 1976. The ICAE is a voluntary, non-governmental

council of about fifty members in all regions of the world (International Council for Adult Education, 1977). The coordinator of the project is Budd Hall, director of research for the ICAE. Five regional representatives have been designated to promote the development of participatory research. These regional coordinators are Francisco Vio in Caracas for Latin America; Y. Kassam at the University of Dar es Salaam for Africa; D. Sundaram at the University of Madras for Asia; A. Stock and H. Calloway, *pro tem* at the National Institute of Adult Education, England and Wales, for Europe; and Budd Hall at the ICAE Headquarters in Toronto for North America.

The overall objective of the project is to "investigate methods of research in adult education and related social transformation programmes which focus on the involvement of the poorest groups or classes in the analysis of their own needs" (Status Report on the Participatory Research Project International Meeting, 1977, p.1). The project involves the following: activities in research of a participatory nature; analysis of the experience of others through examining case studies and reviewing literature; producing guidelines for participatory researchers; deepening the theoretical framework surrounding this work; and identifying the remaining practical and theoretical problem areas (Status Report on the Participatory Research Project International Meeting, 1977).

According to an ICAE news release, funding for the project has been obtained through the research unit of the ICAE and includes funds from the Edward W. Hazen Foundation, the Kellogg Foundation, UNESCO, the Ontario Institute for Studies in Education, the Canadian International Development Research Centre, and the Rockefeller Foundation.

The enthusiasm for participatory research raises a number of fundamental questions. What *is* participatory research? Who has been doing it? How does the methodology compare with established research methodologies? Is it of such potential utility that all adult educators should be taught to carry out such research? In this paper, an attempt will be made to answer these questions.

BACKGROUND

Adult education is often regarded as a marginal activity of educational institutions. It particularly is susceptible to the rhetoric of passionate speakers and writers who argue that the field can become more central to education or that it can begin to lead other university departments in teaching and research. Such claims, which are put forth with great fervor, sometimes divert adult educators from productive work into activities that are romantic diversions.

Nearly twenty years ago, the adult education field gave careful consideration to the claim that andragogy and pedagogy are polar opposites. A comparison between adult education and childhood or youth education was presented as the central basis for establishing adult education as a unique field of practice. The comparison was not, in fact, between the education of children and the education of adults. What was compared was the formal in-school education of children carried out according to a single stereotypic view of the process and the out-of-school informal voluntary education of adults in settings chosen by adults and carried out by expert adult educators. Many adult educators believed that the fundamental distinction which justifies the existence of their field is a dichotomy between andragogy and pedagogy. They appeared to give little consideration to the informal education of youth in clubs, teams, and other voluntary organizations or to the formal, highly didactic education of adults found in business and industry, the armed services, and other formal settings. Many persons in the field believed that adult education, indeed, was the polar opposite of youth education.

The posing of a false dichotomy such as andragogy versus pedagogy may succeed in calling attention to aspects which had previously been overlooked. However, it also tends to discourage thinking and research which might develop a concept of lifelong learning. It would be illogical to search for commonalities of effective teaching and learning after one had accepted the notion that adult and youth education are polar opposities. It appears to us that to the extent an adult educator internalizes the concepts of andragogy and pedagogy as

dichotomous, the ability to examine the processes is correspondingly impaired.

The adult education field is now confronted with another dichotomy: participatory research versus traditional research. The posing of this dichotomy is insidious in that its sophistry deludes the naive and attracts the dilettantes in adult education research. Because the participatory research term has the endorsement of the International Council of Adult Education, has been enthusiastically embraced by an international conference, and has promoters on five continents, it cannot be taken lightly.

The dichotomy will be shown to be false because the term "participatory research" is a misnomer, applied idiosyncratically to activities not conducted primarily to advance knowledge but rather to promote community development. As such, it is clearly not a new kind of research. Instead, it is a variety of activity which aims to produce changes in people and communities as its primary purpose and which shows little potential of adding to knowledge.

In fairness to the International Council for Adult Education, it must be acknowledged that even though the Design for Action adopted at Dar es Salaam insisted that "research should be recognized as an integral part of adult education for development and be participatory in nature," the conferees also advocated that "all adult educators should receive training in the theory and practice of participatory research as well as in complementary quantitative research techniques" (Dar es Salaam Design for Action, 1976, pp. 31-32). To the credit of the International Council, although some of its spokespersons adopt a doctrinaire stance toward research, its major policy statement acknowledges the value of quantitative research rather than urging the cessation of all traditional research which employs conventional methodology.

AN ATTEMPT TO CORRECT WEAKNESSES OF SOCIAL SCIENCE RESEARCH

Participatory research was developed, according to its advocates, in an attempt to overcome weaknesses in the use of conventional quantitative methods. Colletta criticized traditional research designs, claiming that they were based on preconceived theories, concepts, categories, and modalities of analysis which lie outside the frame of reference of the subjects being studied (Colletta, 1976, p. 38). Pilsworth and Ruddock asserted that the weakness of the questionnaire method so commonly employed in survey research is that the investigator imposes his or her own understanding and definition of the system he or she investigates upon the subjects. This imposition, even though unintentional, greatly increases the likelihood that the responses will simply confirm one's own preconceived view of the situation (Pilsworth and Ruddock, 1975, p. 36).

Hall identified four so-called shortcomings of survey research: the survey approach oversimplifies reality and is therefore inaccurate; survey research is often alienating, dominating, or oppressive in character; survey research does not provide easy links to possible subsequent action; and survey research methods are not consistent with the principles of adult education (Hall, 1975, pp. 25-28).

Survey research, like all other kinds of traditional research, concentrates on a selected number of variables and attempts to obtain measures of those variables. No competent survey researcher would ever pretend that his or her instrument was capable of capturing all of any social reality. Accordingly, to call a method inaccurate because it is to some degree incomplete and, therefore, not a perfect reflection of reality is a foolish criticism; no method of study, including participatory research, is capable of dealing with the large number of variables in any social setting.

There can be little doubt that there have been adult education researchers who have conducted their research in alienating, oppressive, and dominating ways. Undoubtedly, others have employed the results obtained through this

research. Nevertheless, these criticisms have to do with the way some individuals have employed survey research and with the findings produced by such research. There is nothing inherent in the methodology of survey research which compels it to be alienating, oppressive, and dominating. Accordingly, this criticism is misdirected and professes to describe the shortcomings of survey research; it, in fact, only identifies some researchers' misuse of the methodology.

Survey research does not provide easy links to possible subsequent action. Since the purpose of such research is only to obtain valid, reliable data as objectively as possible, the researcher does not commit himself or herself in advance to some application of the data. In this regard, all research in the ordinary sense is directed toward obtaining data to enlarge or refine the knowledge base in an area. To fault survey research or any other kind of well-established research procedure because it does not provide an easy link to subsequent action is to reject the basic purpose of research and to insist capriciously that another basic purpose must be served.

The notion that there is something wrong with survey research methods because they are not consistent with the principles of adult education is puzzling. Although one would be hard pressed to identify *the* principle of adult education, even if one of the arbitrary listings were employed, the principles would deal with the practice of adult education and not the conducting of research. It seems most unlikely that there are principles of knowledge generation which are peculiar to adult education knowledge.

The practice of condemning or rejecting a research methodology because it has been misused is scarcely an example of clear thinking. Critics of survey and other so-called traditional research designs delude themselves by confusing inept researchers with the basic characteristics of adult education. Rutstein addressed the ethical dimension of research designs succinctly when he stated:

> It may be accepted as a maxim that a poorly or improperly designed study involving human subjects--

> one that could not possibly yield scientific facts (that is, reproducible observations) relevant to the question under study--is by definition unethical. Moreover, when a study is in itself scientifically invalid, all other ethical considerations become irrelevant. There is no point to obtaining "informed consent" to perform a useless study. A worthless study cannot possibly benefit anyone, least of all the experimental subject himself. (Rutstein, 1969, p. 524)

An account of the development of the idea of participatory research may be instructive. Hall (1973), attempting to apply what he regarded as standard social science research methods in an African country for four years, found himself trying to interpret data from questionnaires he had not designed about a culture that was alien to him. He concluded that an alternative approach to adult education research was needed which (a) avoids what he saw as oppressive ideological pitfalls, (b) provides what he regards as a more accurate reflection of social reality, (c) assumes what he believes is more complete involvement of the community, (d) is linked to principles of adult education, and (e) is "more scientific." He felt that participatory research is more scientific because it produces a more complex and, therefore, more accurate picture of reality than commonly accepted research methodologies. He explained that participatory research is a combination of the idea of community participation in decision-making and the methods of social investigation (Hall, 1977, p. 10).

PRINCIPLES OF PARTICIPATORY RESEARCH

Asserting that "adult education is rooted to a concept of social justice and equality in a way in which other disciplines are not," Hall (1975, p. 27) proposed the following set of principles of participatory research:

1. Research methods have ideological implications.

2. A research process *should* be of some immediate and direct benefit to a community and not merely the basis for an academic report.

3. A research process *should* involve the community or population in the entire research project--from the formulation of the problem to the discussion of how to seek solutions and interpret the findings.

4. If the goal of the research is change, the research team *should* be composed of representatives of all elements in the situation that have a bearing on the change.

5. The research process *should* be seen as a part of the total educational experience which serves to establish community needs and increase awareness and commitment within the community.

6. The research process *should* be viewed as a dialectic process, a dialogue over time, and not as a static picture from one point in time.

7. The object of the research process, like the object of the educational process, *should* be the liberation of human creative potential and the mobilization of human resources for the solution of social problems. (Hall, 1975, p. 28-30)

Six of the seven principles of participatory research include the use of "should," while only one is written in the "if...then" style. The fact reveals that the author is expressing a set of personal beliefs rather than attempting to provide a factual, objective description.

Cain offered cogent criticisms of these principles:

> Involved in these principles are research, pedagogy, and mobilization and it is not clear what purpose is served by combining these three operations in one concept. Further, some of the outcomes described in these principles--the goal of research is change, liberation of human potential, etc.--are not clearly the results of participation or of research. Neither research nor participation can produce change without appropriate action in an environment supportive of that action; humans liberate themselves in a time and space appropriate to

themselves. To load 'participatory research' with these mystical powers may make the package too heavy to be functional and obscure the usefulmess of adding the dimension of participation to research.(Cain, 1977, pp. 12-13)

CRITERIA FOR PARTICIPATORY RESEARCH

In formulating criteria for participatory research, Cain concluded that what is required is a research process which "changes the subject-as-object research approach; asks questions concerning values and motivation rather than or as well as quantifiable factors; facilitates the design, implementation and interpretation of research by insiders; provides for the development of reciprocity among researchers, insiders, and agencies, and permits the benefits of the research to be felt by the insider/'native'" (Cain, 1977, p. 7).

The extent of involvement of the members of the social system being studied in the planning, execution, and interpretation of the study is a focal point for those who write about participatory research. Hall asserted that "we need not more highly trained and sophisticated researchers...but whole neighborhoods, communities and nations of 'researchers'" (Hall, 1975, p. 30). Yet, the criticisms which are offered of traditional research are typically directed at studies conducted in unsound ways by researchers whose training was inadequate.

In one of his attempts to define participatory research, Hall stated that "the term refers to the efforts along several lines to develop research approaches which involve those persons who are the expected 'beneficiaries' of the research. The term deliberately focuses on involvement of those who are traditionally the 'researched' in the formulation, collection of data (widely interpreted), and interpretation of information" (Hall, 1977, p. 10).

At the international planning meeting of the Participatory Research Project in September, 1977, regional representatives agreed "that participatory research means a change in the status of the powerless who formerly have been 'objects' of social science research"

(Participatory Research Planning Meeting Announcement, 1977, p. 7). Participatory research was further defined as a three-pronged activity: a method of social investigation involving the full participation of the community, an educational process, and a means of taking action for development.

THE MEANING OF PARTICIPATION

It may be useful to examine the terms "participatory" and "research." Cain said that the words themselves offer little hint of what the developers of the concept are talking about. He observed, "Participation in our society can be much different from the participatory interactions of other societies. Since the concept depends on a relativistic view of all societies, it is impossible to say that participation means... the same thing in all cultures." And further, "The fact that participation is a North American, Western Europe ideal for a pluralistic society and the fact that research is defined through a rationalistic Western conception of science make the task of the participatory researcher even more difficult in societies that adhere to neither concept. They perceive neither the benefits of participation nor the desirability of research" (Cain, 1977, pp. 8-10).

Coletta's experience helped to point out the difficulty of applying the Western idea of participation in the traditional Indonesian culture. He wrote:

> First, and foremost, we learned to modify our Western ideas about participation. We found that we were not able to interact readily with the villagers themselves; instead we were forced to deal with a mediating group consisting primarily of village and district level persons from the official authority structure. Although these persons participated in the discussions, this would not necessarily ensure their having a say in later decision-making pertaining to the overall project. In experience holds, it seems more likely that the traditional Indonesian way would prevail. The consensus of the group will be taken into consideration, but 'outsiders' will make the

> actual decisions. Thus, a clear distinction must be made between participation in discussions for obtaining information from villagers (research), and village level participation in planning, implementation, evaluation and other key decision-making phases of a project.(Colletta, 1976, p. 43)

Colletta, questioning the value of outsiders' encouraging the subjective input of villagers, felt that it may be another way of directing community development. Again, he wrote:

> We had brought together a group that would probably never have collected to discuss ideas that may never have occurred to them. It was difficult to determine how much of the group participation really came from the group and how much came from the group's sensitivity to what we were attempting to have them do. In other words, is participatory research another exercise in self, and other, delusion, a new term for 'outsiders' directing community development? (Colletta, 1976, p. 44)

This last question is a penetrating one, for it directs attention to the manipulative possibilities within participatory research.

THE MEANING OF RESEARCH

Let us examine the term "research" as used in participatory research. Cain felt that the term is used in a "fuzzy" way and that its proponents are not talking about research *per se* but community involvement in problem-solving carried out within a development project (Cain, 1977, p. 10). This perception of participatory research places it in opposition to existing scientific research.

The proponents of participatory research are not the only persons who have become disenchanted with the use of conventional research methodologies and have attempted to do something about it. A more disciplined approach to the establishment of a methodology that deals systematically with the complexity of the culture in which the behavior of human subjects is to be studied is

exemplified by an approach known as "participant observation."

PARTICIPANT OBSERVATION

Participant observation is a research method which was devised, in the past, to overcome the problems resulting from the amateurish use of questionnaires by researchers who were only minimally acquainted with the population they were studying. Strictly speaking, such unsound social science research produced data devoid of meaning, because the terms intended to measure the dependent and independent variables that had quite different meanings to the researchers than they had for the subjects of the study.

Participant observation refers to "research characterized by a prolonged period of intense social interaction between the researcher and the subjects in the milieu of the latter, during which time data, in the form of field notes, are unobtrusively and systematically collected" (Bogdan, 1972, p. 3). The method is intended to develop informed understanding of complex relationships and social settings based on the investigators' immersing themselves in the social setting they wish to study. In some cases, the reports of participant observations are regarded as complete investigations. In other cases, the period of participant observation is used to generate hypotheses which are tested subsequently by rigorous quantitative approaches which possess both construct and content validity, that is, the major characteristics which are often judged to be lacking in simplistic quantitative field studies.

Qualifications of Researchers

The collection of valid data would seem to be a process that could best be conducted by trained and self-disciplined investigators. Bogdan placed great stress on the preparation and attitude of the researcher who engages in participant observation, emphasizing that the researcher must be trained in the craft of observation and analysis:

> He has become familiar with the problems of observation and has developed certain skills

and techniques to help him. He has also developed a unique perspective in which the research act and the role of observer dominate his interests while in the field.(Bogdan, 1972, p. 5)

Bogdan's understanding of participant observation is in marked contrast to Hall's understanding of participatory research. Bogdan stated:

> The methodology of participant observation... is based on the assumption that a researcher can enter a situation with the subjects' knowing who he is and why he is there, and can establish with them a relationship characterized by trust and a free and open exchange of information. Ideally, the researcher is perceived as a neutral figure, having no special alliances with any subject in the situation and having no relationships outside the situation which might hurt the subjects. The observer is passive in the sense that he does not change the situation in any way that might affect the data.... The goal of the researcher is to see the world accurately from the point of view of each subject in the organization without affecting that view.(Bogdan, 1972, p. 21)

THE PURPOSE OF RESEARCH

Bogdan believes, as do most researchers, that the primary purpose of research activity is to add to the common body of tested knowledge which is available to anyone, regardless of one's goals. He cautioned against the phenomenon of going "native in the field," that is, becoming so actively involved in the activities and life of the subjects that the researcher becomes one of them and, hence, regards his or her research role as secondary to active involvement as a partisan (Bogdan, 1972, p. 28).

Participatory research differs from research conducted by the participant observation method in that the former is primarily concerned with activity intended to change the life situation of the lower socio-economic class, whether or not any contribution is

made to the body of tested generalizable knowledge, whereas the latter is not intended to be used with any particular socio-economic level. Its most important product is defined as its contribution to knowledge. The responsiblity for applying the knowledge acquired through participant observation is not assigned to the researcher as it is in participatory research. Finally, the education of those being observed is not the responsibility of the participant observer; the participatory researcher sees the education of the members of the group served as one of the primary responsibilities.

Participatory Research as Education

The educational process proposed in the definition of participatory research reveals that the research process is "seen as a total educational experience which serves to identify community needs and to increase awareness and communication within the community" (Dar es Salaam Design for Action, 1976, p. 32). According to Swantz (1975a) participatory research has motivational and educational benefits related to community development:

> It shows that surveys can be planned so that their exploitative aspects are eliminated and they become both educational and motivational. (p. 51).

> The method was used as means whereby those participating could be motivated to greater action and educated to greater awareness of their potential and to find ways for solving their development problems. The whole process had an educational element. (p. 49)

Swantz identified the following six educational elements as outcomes of a participatory research project: (1) leaders learned more about communicating with people and about how to solicit people's own ideas and have them plan their own village; (2) coordinators learned skills in handling questionnaires and in processing data; (3) leaders and villagers learned the benefits of self-analysis and how to engage in the process;

(4) people learned the skill of answering questions and writing their thoughts; (5) people who were unable to fill in the forms experienced negative learning, and this experience turned out to serve as a motivational force for self-improvement; and (6) in those villages not operating as a unit, the beginning of a common thinking process was created which prepared people for future planning on a village basis. All of these educational and motivational elements were identified through reports made by the villagers at the final meeting and from statements made by participants.

Jackson (1977) identified some of the learning which emerged in the land and occupancy participatory research study material reported by Nahanni, et. al (1976). No doubt such learning occurred. But what is to be gained by blurring the distinctions between research and education processes?

Participatory Research as Community Development

Another blurred distinction is the one between participatory research and community development approaches. Hall reported that the Community Development Trust Fund in Tanzania began a process of participatory research in June, 1976, in response to a local concern about food spoilage. Attempts at what he reported as the usual research approaches to this problem produced, he claimed, inconsistent and expensive results. He reported that an analytic team was organized, including the people who were faced with the problems, and they engaged in a guided discussion process which produced an effective solution. No doubt this method of problem-solving was effective, but the justification for calling the procedure "research" is not persuasive. A more appropriate term than "participatory research" would be "participatory problem-solving." Jackson used this at one point in his discussion of the participatory research process (Jackson, 1977, p. 12). It is still unclear what logic leads to the conclusion that participatory research, as described in the reports analyzed in the preparation of this paper, is not adequately described under the name "community development." The reason, apparently, has less to do

with the characteristics of the method than it has with the ideological baggage of its advocates and the enhanced possibilities of obtaining financial support from foundations and other sponsors who feel they are supporting innovative ideas and who may already have come to regard community development as traditional.

Components of Participatory Research

No definitive description of participatory research has been adopted by those who assert that they are engaging in that activity. However, in 1977, at a session of the Participatory Research Project International Planning Meeting in Canada, the following seven components of participatory research were agreed upon:

1. The problem originates in the community itself and is defined, analyzed, and solved by the community.

2. The ultimate goal of research is the radical transformation of social reality and the improvement of the lives of the people involved. The beneficiaries of the research are the members of the community itself.

3. Participatory research involves the full and active participation of the community in the entire research process.

4. Participatory research involves a whole range of powerless groups of people--the exploited, the poor, the oppressed, the marginal, etc.

5. The process of participatory research can create a greater awareness in the people of their own resources and can mobilize them for self-reliant development.

6. It is a more scientific method of research in that the participation of the community in the research process facilitates a more accurate and authentic analysis of social reality.

7. The researcher is a committed participant and learner in the process of research, which leads to a militancy on his or her part, rather than detachment. (Status Report on the Participatory Research Project International Meeting, 1977)

Commitment to Community Involvement

The issues of who should be doing research and who should benefit from research activities and findings complicate discussions about participatory research. Hall asserted that social science research is done for administrators and policy-makers in order to get information to use in making decisions for those who are not permitted to do so or to produce reports as a commodity to be sold by researchers. He regarded the conducting of research or the creation of knowledge as a monopoly of the powerful which should be taught to the poor and powerless so they can employ participatory research against those who oppress them. Hall acknowledged that "the use of the term 'participatory research' will not prevent someone from using similar methods to help a group of landlords work out a set of 'tenant-tight' rules and living arrangements" (Hall, 1977, p. 13). Hence, on one hand, participatory research is presented as a new approach to conducting research. On the other hand, it appears that the major distinguishing characteristic is that, unlike traditional research which produces knowledge which may be employed by anyone who acquires the information for either selfish or humanitarian purposes, participatory research can, by definition, only be used properly by, with, or at least in the name of, the powerless.

Commitment to Action

The basic problem is that the proponents of participatory research begin with the assumption that the proper role of adult education is to aid those who seem to be powerless in their struggle against their oppressors. This ideological commitment makes it impossible for them to deal with the process of research as a means of adding to the sum of tested knowledge. The participatory research enthusiasts fail to distinguish between a process of seeking useful data and a process of applying that data. It is this analytical deficiency which leads to so much of the legitimate criticism of the literature on this approach.

Commitment to an Atheoretical Approach

Lindsey, a sociologist at the University of British

Columbia, is critical of the approach taken by those who say they are engaging in participatory research. He characterized them as being idealistically well-intentioned but doomed to failure in the achievement of their grand objectives. Lindsey asserted that "especially in a traditional society, a non-theoretical empiricist approach.... leads to the maintenance of the status quo, of the existing power relationships within the given social structure, and hence, sooner or later, to frustration and disillusionment" (Lindsey, 1976, p. 48). In his critical analysis of the participatory research approach, he characterized it as experimentation without control groups. The direct involvement of the researcher may lead him or her to have a feeling of significance and importance. However, the belief that the existing power relationships and social structures will become apparent to a well-meaning outsider just because one deals with those who seem to be the least powerful members of a society is regarded by Lindsey as naive. He warned that "one must define in the greatest possible detail every facet of the theory of society beforehand in order to be better able to confront it with empirical observations" (Lindsey, 1976, p. 49). He treated the chronic amateurism of some researchers as a serious factor limiting the advance of knowledge in this field.

An Attempt to Re-define Research

The champions of participatory research are engaged in rethinking and redefining research, as the following comment by Swantz (1975a) indicates:

> Research as an academic exercise is an elitist concept. The prestige attached to scholarship, the status of a scientist, and the financial outlay needed for carrying it out all tend to develop class-consciousness in those engaged in research, as well as those who become the object of research.... Research in its goals, methods, and approach can become a basic tool in the transformation process of a society. It does not need to be limited to those with higher education, trained in methods and techniques, in organization of thought or formulation of problems and discursive logic. Ordinary villagers, administrators and teachers can become participants in, not only

objects of, research (p. 45).

But what is left of research if one removes logic, competency gained through education, and training in its methodology and techniques, as well as organization of thought?

Swantz continued, "Research can become a means of communication, an education process in which the roles of educator and the educated are constantly reversed and the common search for solving common problems unites all those engaged in the common endeavor" (p. 45).

Why fuse education and research into a single concept, especially after ruling out the conditions essential for producing valid knowledge? If the activity which is being called "participatory research" is an educational process, why not call it "participatory education" or, perhaps, because of the emphasis on problem-solving, "participatory problem-solving"? Surely it is wiser and more precise to give the process an appropriate name than to make what will ultimately prove to be a futile attempt to redefine research.

Practical Considerations

Other practical considerations stand in the way of conducting participatory research. Lindsey (1976) offered reservations regarding the situation of the people who are to be participant researchers. He felt that the subjects are usually vitally involved in the process of production as a means of earning a living. This involvement leaves little time and energy for extensive participation in research. Another consideration is that the people lack "a perspective of the social structure in which they are imbedded and of possible alternatives to it" (p. 48).

Cain (1977) also posed this question: "How can participation, if accepted as a valid goal, be obtained from people not accustomed to such interaction? What methods can be used to insure participation?" (p. 7). She reasoned further that even if the goal is accepted of making the native the researcher, "we still come up with a big 'how.' To be unclear about what research is, what

we/they are looking for, makes the 'how' even more obscure. There must be a clearer understanding of what participation in research means before the 'how'can be adequately developed" (p. 3).

Participatory Research Studies

The criteria which distinguish participatory research are not particularly obvious or logically sound. A survey was employed in a study by Swantz which was self-proclaimed participatory research. What made it qualify as participatory research is that the questionnaire was administered and scored by African villagers, instead of by trained researchers. Apparently, then, the participatory researchers' dissatisfaction is not with the use of a survey method but with who is using the research tools. If a survey is designed and administered and the results analyzed by villagers untrained in research methodology, its value rises in the opinion of the advocates of participatory research. The opposite occurs when such tools are in the hands of trained researchers. The logic of the position is difficult to follow, especially in considering the results obtained from the participatory questionnaire: "As could be expected, rather serious inaccuracies occurred both in filling in the forms and in summing up the statistics" (Swantz, 1975a, p. 49). Participatory research advocates appear to have developed a survey research method which results in serious inaccuracies but which they believe is superior to conventional survey research methodology because it involves the villagers. Such an approach places a far higher value on participation than it does on producing sound data and conclusions.

Fordham et al. (1975) used a participatory research questionnaire which qualified as participatory research because it was "posted to all respondents but collected by a team of local volunteers in order to provide a human element in the survey" (p. 62). Using local volunteers to increase the rate of return of questionnaires is surely a way of obtaining survey data, but it does seem odd to regard the collection of questionnaires by volunteers as a characteristic which in itself changes survey research into participatory research.

Most of the participatory research studies utilize some form of discussion in the design of a study, in its implementation, or in the interpretation of the results. This discussion may take the form of humanizing a traditional questionnaire, or it may invoke the development of a new-data collection instrument, its administration, the interpretation of its results, or any combination of these steps. Much the same sort of involvement would be considered essential by rigorous researchers as they pilot-test an instrument and assess its construct and content validity in the best tradition of social science research.

Native fieldworkers were trained in the use of interview techniques in which responses were recorded in writing, on tapes, or in both forms in a participatory research project reported by Nahannie, et al. (1976). Outside experts were used to help in the design of research methodology and in training workshops. Outside experts also were involved in translating the quantitative data resulting from this study into "whiteman's tongue" (Jackson, 1977, p. 9). Some participatory research allows for the use of experts so long as they are controlled by the otherwise powerless.

Colletta (1976) divided the people into discussion groups to answer three questions posed about community learning resources. The results were reported by each group secretary, and a list was developed which identified community resources. This list, when classified into patterns such as human, institutional, socio-cultural, economic, and natural mass media, formed the product of the study. These opinion-gathering approaches seem useful as educational and developmental processes. However, they do not measure up to the demanding standards of objectivity, reliability, and validity associated with first-rate classical research studies.

Participatory research may be distinguished from other kinds of research in part by its place on a continuum of quantitative and qualitative research methods. Copeland and Grabowski (1971) discussed two contrasting approaches in adult education research. One emphasized rigor in empirical experimental methodology; the other drew heavily upon inductive approaches such as participant

observation and case studies. The attention given to qualitative strategies by those who profess to be engaged in participatory research indicates that this method belongs at the qualitative end of the continuum.

The processes of participatory research do not meet the rigorous standards of objectivity required in properly conducted quantitative or qualitative investigations. Instead, the subjectivity of the process is put forth as one of its strengths. Nevertheless, quantitative data are sometimes produced by participatory research; decisions are based on inferences drawn from these data.

Some distinctions can be identified between participatory research and other qualitative research strategies. Participatory research differs from grounded theory (Glasser and Strauss, 1967), which is based on a general sociological perspective with the purpose of generating theory. Participatory research is concerned with a specific problem, rather than theory generation, and has the primary purpose of obtaining a solution to a problem.

There is confusion, or at least a lack of precision, in the participatory research literature regarding the difference between participatory research and participant observation. Hall (1975) cited Pilsworth and Ruddock's 1975 study as a participatory approach to research, yet their approach is clearly that of participant observation. In participant observation"... the researcher participates in the situation under study either openly, in the role of researcher, or covertly, and observes the behavior of the people involved" (Pilsworth and Ruddock, 1975, p. 39). The researcher is involved in prolonged interaction with the subjects "...in the milieu of the latter, during which time data, in the form of field notes, are unobtrusively and systematically collected" (Bogdan, 1972). While it is true that participant observation is a methodology which is generally used to develop an understanding of complex institutional forms, to generate sensitizing concepts, and to study social change, it differs from participatory research in a fundamental way. Its primary purpose is to add to knowledge, not to intervene in the functioning of a social system as a means of producing change in the system. To overlook this critical distinction is to fail to comprehend the essential nature of participant observation.

Pilsworth and Ruddock (1975), who contributed an article to the issue of *Convergence* which featured participatory research, did not propose to supplant all existing research methodologies with participatory research. Instead, they counselled:

> Whenever possible the researcher should "triangulate" or use more than one method. It should be acknowledged that all research methods involve valuations of behavior, and different methods provide different types of knowledge. We are not advocating a reliance on any single method; rather, the qualitative and phenomenological research methods should gain a wider acceptance in teaching and research in adult education (p. 41)

They acknowledged that both the purely quantitative and the purely qualitative approaches have inherent limitations and are only incomplete reflections of social reality. Hence, logically, they urge the use of both approaches as a means of obtaining two different kinds of perceptions of any situation under study.

CONCLUSIONS

Given the nature of the literature describing or claiming to be participatory research in adult education and the growing popularity of the term, what inferences might be drawn? The following eight conclusions are offered for consideration by those engaged in research, those preparing others to conduct research, and those enrolled in such training programs.

1. The emergence of participatory research is partly explained by the chronic amateurism which characterizes an appreciable proportion of the research in adult education as well as in other social sciences. Dissatisfaction with the results of research or the lack of application of the results has understandably led to a desire for a more effective research methodology that is closely linked to the application of the findings.

2. Some critics of conventional social science research have not distinguished between the characteristics of various research methodologies, quantitative or qualitative, and the characteristics of the researchers who claim to be employing the methodologies. Accordingly, criticisms which should properly have been directed at the perpetrators of poor research have been misdirected at the methodologies.

3. Anyone who makes a serious effort to comprehend the research which has been conducted by presumably adequately prepared adult educators might be expected to exhibit some measure of humility and to conclude that the researchers, on the whole, were probably as well trained, technically skilled, and unselfish as their critics. Nevertheless, one of the hallmarks of the champions of participatory research has been hubris, not humility. It takes a fair amount of hubris for a researcher to proclaim that he or she has a method which is superior to all other methodologies. Yet, the participatory research literature is weighted down by such pronouncements.

4. It is not evident how participatory research activity differs from the activities which have been associated with community development. A possible distinguishing feature is that community development is not restricted to serving those of the lowest socio-economic status, as the ideals of participatory research require. Community development, in theory at least, may regard the involvement of representatives of all social levels in a given community in discussions and decision-making as essential, whereas participatory research seems directed toward involving only the powerless in an attempt to gain power.

5. The conducting of research and the application of the findings have traditionally been regarded as distinct processes. This assumption acknowledges that the findings of any investigation may be employed in either a humane or an exploitative manner. The proponents of participatory research acknowledge that their methodology could be used by oppressors, as well as by the oppressed. Hence, the process itself is not by nature any more humane than any conventional method of research. Working directly with the powerless is defined

as true participatory research, whereas the use of the identical methodology with the powerful would be regarded either as a misuse of participatory research or as lying outside of its boundaries.

6. If the purpose of research is to make incremental additions to the body of tested knowledge, then the process called participatory research is improperly named, because its purpose is direct action to improve the lot of the disadvantaged.

7. If those who are enthusiastic about participatory research are interested in communicating effectively with other social science researchers, then they have made a poor choice of a name for the process they advocate. They are apparently expecting everyone else to abandon existing definitions and conceptions of research and to accept a radical definition which lacks both precision and clarity.

8. The enthusiasm with which the participatory research approach is being accepted by adult educators in the third world countries suggests that those who have employed traditional research methodologies in these settings have not succeeded in relating to the indigenous adult educators whose primary interest is in development. Whether rigorous adult education research will be sacrificed for action-oriented community development schemes under any label cannot be predicted. The outcome will be determined not only by those who propose a methodology inseparably tied to an ideology but also by those who are conducting rigorous research on variables influencing the quality of life and development.

The proponents of participatory research have performed a useful service in calling attention to the negative value of poorly conducted social science research in the developing world. In doing so, unfortunately, they have made rash claims for a kind of community development approach which they erroneously call "research." If what they advocate can be appreciated for what it is, rather than for what it is purported to be, then the approach may yet make a significant contribution to community development and to the process of adult education.

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PARTICIPATORY RESEARCH: BREAKING THE ACADEMIC MONOPOLY

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The purpose of this paper is to discuss some of the emerging thinking surrounding the concept of participatory research. In order to do that, first it is necessary to place this discussion within a wider context and value orientation. This author shares the conviction of Gunnar Myrdal and C. Wright Mills that social science is not free of values and that -- whether stated or not -- values are implied in research. Secondly, this author does not believe in the neutrality of technique or method and holds that if one can find a "hidden curriculum" in teaching, one can find a similar "hidden process" in research. Thirdly, this author believes that the most important question to be asked on a global basis during these days of widely and officially recognized inequalities is this: *Whom does our work serve?*

In order to examine the discussions surrounding participatory research, the following questions will be raised:

- Is there monopoly in the production of knowledge?
- Has knowledge become a commodity?
- How is knowledge created?
- What is participatory research?
- What are its origins?
- What are some criticisms and responses?
- What are the directions for further work?

IS THE PRODUCTION
OF KNOWLEDGE A MONOPOLY?

> Here I stand, my name is Jowett.
> There's no knowledge but I know it.
> I am the Master of this college
> And what I don't know isn't knowledge.
>
> Attributed to Professor B. Jowett,
> former Master of Balliol.

Have we created a structure for the production of knowledge which has nearly ensured that it is impossible for a worker in Illinois or a farmer living in Bwakira Chini, a village in Tanzania, to contribute to the world's store of information? The standard for research that is put forth by the various influential academic societies and intellectuals has been shaped necessarily by the needs which the state has for research. We have created a set of requirements in terms of techniques and style which requires years of specialized training, most likely a Ph.D., to achieve. This practice, it has been suggested, has resulted in a situation where a few persons of middle- and upper-class positions are working on the theoretical and practical academic discussions and are creating knowledge about the entire universe of people and problems.

What is important to recognize is that some people's common sense becomes recognized as philosophy while others do not. Gramsci (1971) has suggested that "all men are intellectuals...but not all men have in society the function of intellectuals" (p.9). He described two groups of intellectuals. There are "traditional" intellectuals, the scholars and scientists, who although seemingly detached from class positions, nevertheless are the result of specific historical class formations. There also are the "organic" intellectuals, the thinking and organizing persons in any class. These persons are not usually recognized as intellectuals or, in our terms, as persons capable of creating knowledge; they are the union leaders, community organizers, and farm organizers. Gramsci pointed out that the working class is capable of producing its own intellectuals and that one of the

functions of those engaged in organized working-class politics should be to make links between the intellectuals of both types and foster the recognition of workers' right to create philosophy and knowledge.

Let me illustrate this in a very concrete form. I worked in a university in Africa as head of a research unit in adult education. I worked on a team with Tanzanians, studying the educational needs of peasants and rural workers in various parts of the country. We were struggling with the identification of problems which might be solved in part through educational programs. Through our research, we dealt with questions of shortage of water and food, absence of preventive or curative medical care, and a high incidence of disease. We attempted to interpret and analyze various kinds of data about the lives of these people and their concrete problems.

At the same time we were working on the concrete problems of these people in their villages, our own lives continued. Our problems continued--but they were not the same problems. My problems had to do with finding butter, which was scarce, taking the car to be serviced, inviting someone to supper, and the like. My colleagues' problems had to do with similar situations, compounded by requests from and obligations to the extended family (a cousin needed school fees; an aunt had died and needed proper burial).

Why is this important? The point is that with all the best intentions in the world, we were never going to fully comprehend, much less intuitively grasp, the conditions and the priorities for survival and growth in the villages. We were not even likely to understand the problems of our fellow urban dwellers living in the shanty towns. In the end, our ability to plan educational programs depended on the closeness of *our* interpretation of *their* world to reality. By virtue of our class positions and class interests, the knowledge which we "created" about their lives was bound to be in error. Blum (1971) explained the problem differently. He indicated that if our analysis shows that knowledge is constructed to serve the interests of its producers, then, by definition, knowledge is constructed by those who do not share the interests of the masses. Furthermore,

if we relate our concept of reality to the world of the masses, the knowledge which as been created is obviously biased and invalid.

We have come dangerously close to creating a situation in the social sciences which effectively denies recognition of the knowledge-creating abilities in most of the peoples of the world. Modes of indigenous education in Africa which have provided structural frameworks and interpretations of the world are missing from what we represent as a universal body of knowledge. What are the implications, for example, of the fact that the peoples of southern Venezuela have a precision in naming the types and colors of grass that grow there, a precision that is beyond the scope of common English or Spanish? What is the importance of the fact that the vocabulary for ants found in Hausa in Northern Nigeria is far richer than in any European language, or that the Maasai have concepts for cattle exchange relationships and physical types which even Texans cannot match? In North America, workers in industrial plants knew about work-related illnesses years before they were recognized by the medical profession. People on welfare knew more about the psychological effects of economic dependency than did the psychologists. A search through each person's experiences will produce many more examples of detailed knowledge which has not been created by professional researchers.

THE PRODUCTION OF KNOWLEDGE AS A COMMODITY

> The class which has the means of material production at its disposal has control at the same time over the means of mental production, so that in consequence the ideas of those who lack the means of mental production are, in general, subject to it.
>
> Karl Marx (German Ideology)

The production of knowledge throughout the world has become big business. Evidence can be found in the size and structure of the university and research

establishments with which we deal. As early as 1962, estimates were that nearly 28.7 percent of the current American gross national product was concerned with the production or dissemination of knowledge (Machlup, 1962).

The important point about these observations is that if the production of knowledge has become a business, then knowledge itself has, to some extent, become a commodity. Commodities, as products for exchange, are directly subject to the influences of the market economy. This implies that the type of knowledge created is determined, by and large, by the material social relations.

John Horton (1975), in discussing sociology as a focus of social scientific knowledge production, described the situation as follows:

> A reifying scientific consciousness expressed the commodity organization of scientific labour. Sociologists have escaped neither the commodity market nor commodity thinking.... Like other workers in a capitalist society, intellectuals survive by producing commodities for exchange . (p. 175)

That there is at least a form of commodity production is clear. As individual academics, our ideas are "packaged" in the form of papers, books, journal articles, and reports which are exchanged directly or indirectly through seminars, international conferences, and symposia. Departments within universities are developed and supported by "selling" their services to the state or directly to industry. Within the many industrialized capitalist states, international studies as a specialization has come about directly through the initiative and support of national governments which have a need for a knowledge base about Third World countries. The "institution building" grants of the United States Agency for International Development, grants by the Ministry of Overseas Development in the United Kingdom to institutions such as the Institute for Development Studies, and at least partial support for various university departments through CIDA in Canada are examples of how the economic need stimulates production.

In an earlier paper, I characterized the situation as

follows:

> For a person working in a university or a research institution, knowledge is effectively a commodity. In the narrowest sense, researchers gather or "mine" ideas and information in order to survive and advance economically. Priorities are given to collecting data in a central point, summarizing it and then packaging it in such a way that it can be marketed. The need to serve policy-makers is also recognized by some as an additional market (usually the best funded projects). The need to serve the people from whom the information has been gathered (the unemployed, urban immigrants, poor farmers, etc.) is indirect and by necessity of low priority. These groups will not buy the results and perhaps didn't want the research in the first place.(Hall, 1977, p. 23)

But is knowledge, strictly speaking, a commodity? Are intellectuals workers in the academic form of a capitalist mode of production? Shaw has argued that the products of the knowledge industry are, in fact, "pseudo-commodities." He argued that the prices of the objects exchanged-- the books, articles, and so on -- are not as important as the act of publication itself. Most academics are content to have articles published with no direct payment at all. The role which knowledge production plays has much more to do with the career structure within the academic world. Nicholaus (1972) described the American social science picture in the following way:

> In the post-war era, the road to prominence, hence, office within the profession, has been paved with research publication. Once he obtains financing for a research venture, the sociologist builds up, through publication, his professional reputation. This form of capital is then convertible into academic promotion, which yields better access to more research funds, permitting further publication and so on up, until, as supervisor of graduate students, the successful sociological entrepreneur is in a position to start and manage younger persons on the same spiral.(p. 56)

While Shaw seemed sensible about the pseudo-commodity relationship of the products of individual academics, knowledge was seen in direct commodity form as consultancies done either on an individual basis or by a university department and specialized agencies. Large groups of consultants operate in Europe and North America and elsewhere in the international sphere. Consultants do not aspire to political or academic independence, but they do respond to the direct needs of the state or private industry. Their commodities are clear and obvious. And while there is not space enough at this juncture to expand this issue, it is quite evident that within both the national and international spheres, the influence and power of these firms is substantial.

If one carries the analysis of knowledge as commodity production further, the parallels with general commodity production within capitalism become clearer. Three characteristics of commodity production are the tendency towards monopoly production, the creation of uneven development, and the facilitation of economic penetration and dependency. The tendency toward monopoly production has been dealt with already.

To what extent is there an uneven development of knowledge production within the international sphere or even among the universities within countries such as the United States? Is there not a tendency for the large or already important universities to attract more funds for research by virtue of their reputations? Nearly all the books used in sociology courses in African universities are written in the United States, Britain, or France. The sheer volume of knowledge production is absurdly tipped in the direction of those nations which dominate the international economic markets. Cultural dependency results directly from the uneven development characteristic of other forms of capitalist development. This extends, as we will see, into the questions of legitimatizing research and research methods.

Do researchers and faculty at the universities of Nairobi, Madras, and Peru have more in common with other academics in the international academic world than they do with the people and problems in their nations? Has the pattern of knowledge transfer, which is still on-going,

exported more than institutional structures? Does the fact that most academics at the University of Dar es Salaam in Tanzania have been educated in the United States, Canada, or the United Kingdom have wider implications than have been generally acknowledged? What does this say about the kinds of people who product our world's knowledge?

HOW IS KNOWLEDGE CREATED?

> A voyeur gets private satisfaction from watching other people's sexual activity. Voyeurism is self-indulgent, parasitic and sterile. "Academic voyeurism" may be defined as the study of other people's problems for the self-gratification of the student. It, too, is self-indulgent, parasitic and sterile. Both types of voyeurism are pathological and need treatment.
>
> S. Goodlad (1976)

Discussions about how knowledge is created -- in this interpretation, how research is conducted -- must inevitably begin with some concept of what knowledge is. To avoid the pitfalls of epistemological debate, I will refer to the definition of Maurice Cornforth (1955), who wrote from a dialectical materialist position: "We gain knowledge...only insofar as we develop our ideas in such a way that their correspondence with reality is proved and tested" (p. 149). It is with the question of proving and testing correspondence with reality that social science has been engaged in one of its most vigorous debates.

By far the most heated criticism of research methods has focused on the use of the various forms of survey research, due in part to its ubiquitousness as a form. While not needing to dwell at length in this paper on a subject which has been widely covered elsewhere, it is important to review some of the cititcisms to see how alternative approaches differ.

1. *The survey research approach oversimplifies social reality.* In addition to the arbitrariness of instrument construction

or the class bias of such specific tools as semantic differential tests and various other tests devised by those who work from a primarily psychological base, these approaches have other weaknesses. A research process that extracts information from individuals in isolation from one another and aggregates this into a single set of figures does so at the expense of reducing the complexity and richness of human experience. Social responses to problems by groups of people are not necessarily the same as the total of individual responses of people acting alone. It is, of course, correct to say that the use and interpretation of the figures "depends on the institutional and social context within which the research is embedded" (Carr-Hill, 1974, p. 30). But even given an institutional framework that encourages popular participation or control of decision-making, the representation of needs by a set of figures, such as "22 percent of those interviewed said that their home environment has had the most influence on their career choice," or "42.6 percent of teachers report problems," is unsatisfactory The illusion of accuracy through numbers has long been perpetuated by many of us, resulting at least partly in a hiding, obscuring, or mystifying research.

2. *Survey research is often alienating, dominating, or oppressive in character.* If one accepts Freire's point that teaching methods have ideological implications, then the same holds true for research methods. If one is concerned with increasing people's capacity to participate fully and gain some degree of control over their lives, then research methods themselves can be part of this process, as Swantz has shown. Questionnaires or interviews designed in an office of a university or adult education institution are by nature one-sided. This process regards people as sources of information, as having bits of isolated knowledge; however, they are neither expected nor apparently assumed able to analyze a given social reality. At the extreme, researchers often take up people's time with badly formulated questions, make interpretations based on little experience in the area, or make social class the basis of programs which are expected to be useful and relevant. As C. Wright Mills (1959) noted:

> The style of abstracted empiricism (and the methodological inhibition it sustains) is not well suited to a democratic political role. Those who practice this style as their sole activity...cannot perform a liberating educational role.... To tell individuals and publics that they can "really" know social reality only by depending upon a necessarily bureaucratic kind of research is to place a taboo in the name of science upon their efforts to become independent men and substantive thinkers...it is precisely the job of liberal education *and* the political role of social science *and* its intellectual promise to enable men to transcend such fragmented and abstracted milieux (the social sciences) to become aware of historical structures and of their own place within them.(p. 89)

Research approaches of this style often create the illusion among those who are the suppliers of information that research is rigorous, highly technical, scientifically "pure," and that it can only be done by the university-trained. The abilities of people to investigate their objective realities are not stimulated, and the pool of human creativity is kept within narrow confines. Those most familiar with the problems and whose daily existence is affected by poor health, poor nutrition, low levels of production, or past failures in education are effectively taken out of the active process of making the changes which might lead to improvements. Control is left to those who, by definition and levels of training, are outside the experiences within which change is sought.

3. *Survey research does not provide easy links to possible subsequent action.* Much research in adult education is action-oriented. It may represent an attempt to determine a community's educational needs or to modify existing programs through an evaluation/research process. In either case, it is expected that when changes are made, the people in the community or the participants in the adult education program will participate more actively, more efficiently, or will gain increased benefits over what had existed before. Basic principles of planning stress that the likelihood of full and effective participation in any venture -- educational, political, or social -- is improved

by involving would-be participants in the decision-making process. In addition to resulting in a poor source of information, research which has alienated respondents, or at best treated them as sources of primitive information, has little likelihood of creating the active and supportive environment essential for change.

A research team dealing with questions of vocational education in Tanzania reflecting on their work accurately described this problem:

> The data-gathering methods were not strictly participatory ones and imposed questions upon the respondents, thus leaving them in a passive role. This antagonized their active participation in the research and hindered, therefore, the creation of a base of action and interaction within the research and after the research. (Christian Council of Tanzania, 1977, p. 17)

This lesson was taken seriously by the researchers. In the meantime, local research teams were formed in the areas where work was being done, and they have continued their research.

WHAT IS PARTICIPATORY RESEARCH?

It should be emphasized that participatory research is an emergent concept. It is not the "property" of any single person or group; it belongs to those persons, both professional and nonprofessional, who work with and share ideas on many practical issues and problems. It is one aspect of the continuing search for effective research tools that has originated in its present form in the field of adult education. At present, there is a loose international network of several hundred persons with which the International Council for Adult Education cooperates. Overall direction of the network is in the hands of five regional coordinators: one each in Caracas; Dar es Salaam in Tanzania; Amersfoort in the Netherlands; New Dehli; and Toronto.

At the first planning meeting of the Participatory Research Project (1977), participatory research was described as a three-pronged activity: a *method* of social investigation involving the full participation of the

community, an educational *process*, and a means of taking *action*. A number of components of participatory research were identified:

1. The problem originates in the community itself, and the problem is defined, analyzed, and solved by the community.

2. The ultimate goal of research is the radical transformation of social reality and the improvement of the lives of the people involved. The beneficiaries of the research are the members of the community itself.

3. Participatory research involves the full and active participation of the community in the entire research process.

4. Participatory research involves a whole range of powerless groups of people: the exploited, the poor, the oppressed, the marginal, etc.

5. The process of participatory research can create a greater awareness in the people of their own resources and mobilizes them for self-reliant development.

6. It is a more scientific method of research in that the participation of the community in the research process facilitates a more accurate and authentic analysis of social reality.

7. The researcher is a committed participant and learner in the process of research which leads to a militancy on his/her part, rather than detachment.

This definition and list of components were collectively arrived at by a group of fifteen researchers from eight countries who are engaged in work of this nature.

COMPARISON OF RESEARCH APPROACHES

ISSUES/ACTIONS	PARTICIPATORY RESEARCH	MOST COMMON SURVEY APPROACHES
Problem Identification	community or group experiencing the problem	most often researcher or other outside person
Locus of choice of methods for gathering data	community	researcher
Methods of data gathering	.wide variety, including group meetings, use of videotape, seminars, workshops, surveys, use of drama and photographs .developmental and reformable .focus on collective response	.some variety, but most often based on some form of survey .fairly static .focus on individual response
Analysis and interpretation of data	emphasis on collective analysis and interpretation by those involved in the problem	individual analysis by researcher, sometimes with limited "feed-back" from clients
Use of results	direct, planned for, and applied by the community	serendipitous, not usually an integral part of the process

What Are Its Origins?

It is important to recognize that while we may be using the term in a different context today, the concerns we are expressing have a history and continuity in social

science. Many of the ideas which are finding new opportunities for expression can be traced to the early field work of Engels as he aligned himself with the working classes of Manchester during his early periods. Marx's use of a structured interview, the *Enquête Ouvrière*, with French factory workers was another sometimes forgotten antecedent (Bodemann, 1977). More recently, aspects of the work of Dewey, George Herbert Mead, and the Tavistock Institute in London have outlined methods of social investigation which are based on other than a positivistic epistemology.

By the late 1950s and early 1960s, the dominant international research paradigm was a version of the North American and European model based on empiricism and positivism and characterized by a high degree of attention to instrument construction and rigor defined by statistical precision and replicability. Through the elaborate mechanisms of international scholarships, cultural exchanges, and training of researchers in Europe and North America, this dominant paradigm was extended to the Third World. Research methods, through an illusion of objectivity and scientific credibility, became one more manifestation of cultural dependency.

The reaction from the Third World, beginning in Latin America, has taken many forms. Dependency theorists such as Dos Santos, Frank, Amin, and Leys have outlined some of the mechanisms of economic and cultural dependency. Education has been analyzed from a cultural dependency viewpoint by Freire, Carnoy, and others. Hence, in the field of research methods, Third World perspectives have grown out of a reaction to approaches developed in North America and Europe which not only have been created in different cultural settings but which contribute to already existing class distinctions. The Third World's contribution to social science research methods represents an attempt to find ways of uncovering knowledge which work better in societies where interpretation of reality must take second place to changing that reality. If social science is to serve the majority of people in Asia, Latin America, and Africa, then it must be linked to a process by which that majority can achieve not only a voice in determining the future, but the physical means by which to survive.

In a personal sense, the author's awareness of the necessity for alternative approaches to research came from working four years in Tanzania, a nation which was committed to a socialist transformation by means of full participation of people at the base in all decisions which affect their lives. The attempts to take an unbiased, objective, and distant research stance toward such radical social transformation produced obvious contradictions. Working in the field of adult education with a heavy emphasis on mass-based programs, research needed to be practical, accurate, and linked to the overall ideological positions. It also needed to lead to subsequent action.

In Tanzania, the practice of community development, adult education, political education, and agricultural education provided experiences which contributed to a new approach. The tasks which a village adult education committee or an Ujamaa village committee were undertaking provided concrete examples of local analysis of problems. As usual, the intellectuals were somewhat surprised to find that villagers were able to conduct very sophisticated and strategic political or economic analyses of their own situations. Villagers worked out elaborate marketing and planting strategies around their own crops and their construction needs.

The social sciences had some contributions to make to the search. Historically, anthropology had been non-action-oriented and elitist in practice and had a negative connection with the colonial period. But anthropology also had had a tradition of in-depth (if often secretive) community level work, although it had not shared either its analyses or its information with the communities which had supplied the information.

The Tanzania Bureau of Resource Allocation and Land Use Planning through Dr. Marje-Liise Swantz and teams of students and village workers, in working on questions of youth and employment in the Coast Region of Tanzania and later on studies of socio-economic causes of malnutrition in Central Kilimanjaro, provided practical experience in what was becoming known as participatory research. A visit by Paulo Freire to Tanzania in 1971 acted as a stimulus to many social scientists who might not have been as impressed by the already existing experience

of many adult educators or community development workers.

The basic requirements for participatory research as outlined by Swantz (1975) are as follows:

1. It needs to be planned so that at least part of it is of immediate interest to the people in the studied community and so that the community can expect to benefit from its results.

2. It should involve the people for whose benefit it is carried out in the process research, both in formulating the immediate problems and in finding solutions to them.

3. Research should incorporate into itself as many as possible of those working locally toward development of that community, be they village leaders, administrators, educators, or extension officers.

4. The educational and motivational potential of such an engaged research method should be fully utilized for the benefit of everyone involved in it.(p. 45)

What was happening in a small way in Tanzania already had begun in Latin America in the early 1960s. Stimulated in part by the success of the Cuban revolution, Latin American social scientists began exploring more committed forms of research. One of the most useful roles of Paulo Freire has been to bring some of the current ideas of Latin American social scientists to the attention of persons in other parts of the world. His work on *Thematic Investigation* (1973), first in Brazil and later in Chile, was an expression of this search. Others, such as Beltran and Gerace, have explored alternatives through concepts of horizontal communication (Beltran, 1976; Gerace, (1973). Fals Borda and others in Columbia have been engaged in "investigacion y accion," while Reed and the Darcy de Oliveras have made us aware of militant observation (Darcy de Olivera, 1975).

NOT THE THIRD WORLD ALONE

While the specific term "participatory research" developed in the Third World because of crises precipitated by dysfunctional concepts of one-way, detached research in a world of urgent immediate problems to be solved, a consciousness also was growing in Europe and North America. The "Frankfurt School" was rediscovered through Habermas and Adorno. "Action Sociology" was placed on the agenda of most academic meetings. In Switzerland, researchers working in curriculum development adapted methodologies from political research to their needs (Moser, 1977). In Canada, Stinson developed methods of evaluation along action research lines for community development work (Stinson, 1977). In the Netherlands, de Vries has explored alternatives from a firm philosophical base. And the National Institute for Adult Education pioneered participatory research through its evaluations of the British literacy project (Holmes, 1976).

It seems as though work in alternative research methods has a much greater sense of equal international participation than did the earlier social science work. In dealing with problems of social inequities, extreme class differences, and wide imbalances in income and resource allocation, the Third World has very much to offer. It is entirely appropriate that we recognize both the existence and the power of these contributions.

CRITICISMS OF PARTICIPATORY RESEARCH

In a network devoted to the development and refinement of complex and controversial ideas, there is a constant process of criticism and evolution. By far the most thorough and tough-minded criticism comes not from the professional academics but from many nonprofessional people with whom we work in communities, neighborhoods, and villages. But, often, these comments and criticisms are not written and circulated and, therefore, do not reach the offices of scholars. Of the various written comments, two critiques have been particularly thoughtful and thorough, one from the right by Griffith and Cristarella (1978) and one from the left by members of the participatory research network in Tanzania. Both

critiques contain some valid and important points; both make statements which need responses, if not answers.

Let me begin with several points raised by Griffith and Cristarella.

1. The basic problem is that the proponents of participatory research begin with the assumption that the proper role of adult education is to aid those who seem to be powerless in their struggle against their oppressors.

2. Critics of survey and other so-called traditional research designs delude themselves and others by confusing the inept researchers with the basic characteristics of research models.

3. The distinction between learning and research has been blurred; it is the same thing as community development.

4. It fails to distinguish between the process of seeking knowledge and the process of applying that data.

5. The use of the word "should" reveals that the author is expressing a set of personal beliefs.

6. Participatory research is weighted down with hubris and oracular pronouncements.

In response:

This author cannot help noting that Griffith regularly has taken it upon himself to defend the status quo; he does it thoroughly and with conviction. Hence, it is with a distinct sense of pride that participatory research joins George Counts and Paulo Freire as a subject of critique.

(1) The basic *problem* with participatory research -- as viewed by Griffith and Cristarella -- represents the basic *difference* between them and advocates of the approach. The former insist that research is neutral, objective, and value-free (or at least it *should be*).

Research is no different from any other human activity. It operates within a social context and is subject to the same forces and pressures as any other activity. To hope for a research process outside of social and political forces is naive at best.

To posit as the basic problem the advocacy of the rights of the powerless in the world we inhabit is more than naive. It is dangerous. But it may be that this point is less clear to those working in the relative security and well-being of academic life in North America. It is certainly clear to those working elsewhere.

(2) Advocates of so-called traditional research often defend themselves by pointing out that the weaknesses of their models "is due to ineptness of researchers." There are two points to be made here: (a) that a model which defies correct use by nearly all practitioners is in any case defective; and (b) that even if it were possible to do a *perfect* piece of survey research, a number of problems would remain in a model that is based on individual data, individual analysis, and confusion of detailed statistical precision with scientific accuracy.

However, a very good point which Griffith, Cristarella, and others have made is that too much emphasis has been put on positing participatory research as a substitute for survey research methods. The first formulations of participatory research mistakenly, this author now believes, placed too much of the burden of the argument on the weaknesses of survey research methods. In fact, a number of examples of participatory research make use of a survey. The key difference, however, is that the surveys are used as tools for *collective* analysis by those experiencing the problem.

(3) The issue of the blurring of the lines among research, learning, and community development is important. It deserves and will receive

much more serious reflection over the next few years. Based on varied experiences by the North American team in Toronto, one would have to conclude that, at the action level or at the individual or community level, very little difference exists between research and learning. What is it called when workers study the health conditions in their work places or when learners reflect systematically on learning needs? Is it learning or research? Some might say that if professionals do it, it is research; if nonprofessionals do it, it is learning. Others might say that the degree of systematic or logical analysis is the key difference. But since much learning is carried out as systematically as some research, or more so, the question needs to be turned around and rephrased: What is lost in blurring this distinction or who separated research from learning in the first place?

The second part of this issue is whether participatory research is the same thing as community development. Griffith and Cristarella seem to answer by saying it is not, i.e., community development is interested in the development of the *entire* community, whereas participatory research is interested in the marginal or neglected segment. I expect that most community development professionals would quickly jump on their statement and point out that there are parts of a community which one does not in fact want developed, such as slum lords, corrupt businessmen, or the super rich. And, further, (they would point out) that only the short-sighted would fail to see that it is in the interest of the entire community to ensure that the poorest reach a minimum level of basic survival before the richest pad their own levels still more.

The lines remain somewhat blurred because, when an activity is based in and with a community, the subtle linguistic and theoretical differences possible in the abstract are less visible. Participatory research could well be seen as

the first stage of a community development process in theory. In practice, participatory research places more emphasis on systematic collective analysis of problems and refinement of interpretation than does community development; however, for most advocates of either, it is the results which count rather than the terminology.

(4) The criticism that participatory research fails to distinguish between the process of seeking and applying knowledge points out another fundamental difference in approaches to analysis. Griffith and Cristarella seek knowledge and facts in an either/or situation. Seeking and applying knowledge and subjectivity and objectivity are seen as distinct and separate processes. From a dialectical point of view, there is a necessary interrelationship and interaction. Seeking and applying knowledge are both parts of the dialectic of knowledge creation. Knowledge is produced through the interaction of reflection and action.

(5,6,7) A minor response to a minor criticism in point 5 is this: in criticizing this author for the use of the word "should " as evidence of the possession of personal beliefs, Griffith and Cristarella imply that I *should not* use it. As to our penchant for "hubris" and "oracular pronouncements," I would say that enthusiasm on our part, particularly in the first papers, combined with a defensiveness on their part may have produced that impression. Let me apologize if that is a more general impression. It is only too clear to all of us that we know very little and have only begun this exploration. We are neither first nor unique; we are simply engaged. We have from the beginning urged involvement and criticism, and we continue to do so.

Their final point (actually one of their first in the paper) is that our pleas will sway the "guideless" adult educators. That kind of paternalism and elitism is particularly

disturbing. It would seem to me that adult educators will do what anyone else will do. They will try new ideas and, if they work, they will use them. If they do not work, the ideas will be discarded -- with or without some kind of protective professionalism from on high.

Points Raised and Responses
to the Tanzanian Critique

1. Advocates of the approach have rarely questioned the class interests that the researcher objectively serves and the false consciousness or ignorance of the oppressed, who are blinded by ruling class ideologies or their own petty property interests (in the case of the peasantry).

2. Participatory research is eclectic, open-ended, and effused with humanistic idealism.

3. Participatory research has disregarded the importance of detailed theory-building.

4. A more effective route to the goals claimed by the advocates of participatory research is the method of historical materialism, which defines social transformation in terms of the progressive development of the class struggle.

In response:

For two reasons, the criticism from Tanzania of the early developments of participatory research have played a very important role in shaping our work: (a) because Tanzania was central to the beginning of the participatory research network, and (b) because the Tanzanian critiques share a common commitment to improving the conditions of life and access to power of the poorest classes.

(1) Reaction to this point has produced two results: (a) a more explicit and thorough analysis of the role of research in the state from a class framework and a more self-critical look at the role of middle-class researchers in overall social transformation; (b) this point has stimulated a recognition of the importance

of continuing *micro* and *macro* research. Effective action is based on effective analysis. Participatory research can produce detailed knowledge about the ways in which certain social conditions function, but some kinds of information are only known outside the community. The ideal situation would appear to be a combination of a political-economic view with the detailed and mobilizing potential of participatory research.

(2) Participatory research is still eclectic; it is still evolving and still seeking new expression. At this stage, many feel that it is still important to maintain that openness and eclecticism, at least regarding modes of collective analysis and means of involving people in common actions. As with most activities which begin in a humanist mold and try to confront social reality, realism, humility, and cynicism have grown as our work as taken us into many concrete and complex situations.

(3) Again, this point is well taken. The question raised in response must be this: *How is theory built*? People like Glaser and Strauss, working on grounded theory, demonstrate one approach. Theory from a dialectical materialist point of view is the synthesis of theory and practice. A more thorough analysis of what constitutes practice is necessary because the universities of the world are replete with Marxist scholars who are removed from action and change and as isolated from working men and women as the most ardent neo-classical economist.

(4) This last point remains to be explored more thoroughly. At this point, most advocates of participatory research would not agree that the method of historical materialism is sufficient in itself to bring about the goals of structural transformation. The creation of class consciousness does not occur entirely by outside researchers' analysis of class structure and social formations. This needs to be refined and confirmed by people themselves in the analysis of their own situations.

DIRECTIONS FOR FURTHER WORK

During the past year and a half, the Participatory Research Project has concentrated on becoming engaged in a variety of direct participatory research experiences. It is the intention now to begin a new phase of reflection based not only on direct and personal involvements but rather on shared analysis of others' experiences. A number of the following themes have been identified as useful for elaboration and exploration:

- Examination of experiences in visual modes of collective analysis
- Examination of the means by which community-based analysis contributes to the development of theory
- Examination of the interrelationships between the roles of middle-class professionals and the issues of control of research and collective analysis
- Examination of the question of scale in participatory research (Must it be local/small scale?)
- Examination of the workings of participatory research in the variety of different social and historical contexts: formal groups, paid work, unpaid work, supportive and non-supportive environments.
- Examination of the use of collective analysis in the user choice of alternative technologies
- Examination of epistemological implications for adult learning theory of results from participatory research

CONCLUSIONS

One of the strongest impressions I have after working with people in many countries who are engaged in social

struggles is that the knowledge which is most central to their success is that which exists in the minds of the men and women who *keep going*. All the years of organized professional social science research and all the vast heaps of print which have somehow contributed to that mystical body of knowledge have offered little direct help either to the reduction of suffering or to the improvement of the welfare of the world's population. This recognition is, at the same time, the means of maintaining our humility and the stimulus to keep working.

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A CONCEPTUAL AND METHODOLOGICAL PERSPECTIVE CONCERNING RESEARCH ON PARTICIPATION IN ADULT EDUCATION

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INTRODUCTION

The last five years have witnessed a phenomenal growth in the adult education enterprise and almost universal adoption of lifelong education as the master concept for the organization of educational systems. Accelerating social change, ecological perils, and the existence of problems that cannot be met through schooling have created a situation where adults must continue to learn. Learning is required for successful living. It is essential to the maintenance of democratic societies and life-support systems (Boshier, 1978a). For adults to learn successfully, they must have opportunities to participate in programs where conditions have been arranged to result in high levels of learning.

Education should not be limited to children and adolescents. Policy-makers must realize that social, economic, and cultural goals cannot be achieved without coherent social policies that place a high premium on participation in adult education. In some parts of the world, governments are creating new legislation and operations designed to improve learning opportunities for adults. Many Third World governments view participation in adult education as essential to social and economic development; governments in developed parts of the world are placing particular stress on "open learning" or distance education. But everywhere the danger exists that the burgeoning field of adult education and innovations flowing from lifelong education will flounder because of inadequate participation research.

Policies based on the notion of lifelong education have numerous goals, e.g., to result in many forms of formal and informal opportunities for learning; to erode barriers between segments of the education system; to link educational policies to national and international aspirations for social, economic, and cultural development; and to eradicate barriers which impede access to educational opportunity.

Democratization

A fundamental principle of lifelong education concerns *democratization*. The concept consists of two elements: the involvement of participants in the planning of their own learning experiences and the removal of barriers that impede access to opportunities for learning. These elements of a democratized learning society are demanded by the authors of the Faure (1972) report, by international conference delegates (UNESCO, 1972; UNESCO, 1976), and by others wanting to harness community resources for education and learning. De-schooling advocates such as Illich (1970) also want education democratized; however, they argue that while most resources for education are poured into institutions, democratization is not likely to occur.

Although calls for democratization became strident in the 1960s, adult education traditionally has manifested concern for learners from the lower socio-economic groups and has shown awareness that participants should be involved in the program planning process. These themes emerged in the Adult Education Committee Report presented to the British Ministry of Re-Construction (1919), in literature produced by the founders of the Workers' Educational Association (Mansbridge, 1920), by Lindeman (1926), and in the first "textbook" of adult education (Bryson, 1936). Authors of the 1919 report confidently suggested adult education was a "permanent national necessity" and should be "universal and lifelong."

The first element of democratization (involving the learners) is incorporated into program planning through the needs analysis and objective-setting processes. At the instructional level, good adult educators actively engage participants in instructional design and management. An effective instructor adapts external conditions for learning to the characteristics of the adult learner (Knowles, 1970). The

second element of democratization involves removing barriers that inhibit and creating incentives that enhance the participation of persons in lower socio-economic groups. As yet, few adult educators have developed reliable ways to eradicate socio-economic barriers to education.

Participants in adult education institutions that have conducted clientele surveys appear to be drawn in disproportionate numbers from the upper socio-economic groups. Twenty years ago, Verner and Newberry (1958) bemoaned this situation and noted that adult education was widening the gap between the educated and the educationally underprivileged by encouraging the former to continue learning and, therefore, keep in step with changing conditions, while the latter group was left in a growing state of maladjustment. Since the problem was not ameliorated in the 1960s, the educational needs of disadvantaged persons emerged as a major theme of the Third World Conference on Adult Education (UNESCO, 1972).

Controversy surrounds the implications for democratic government as a consequence of social apathy among certain segments of the population (Dahl, 1963; Walker, 1966). But adult educators agree that high levels of participation should be encouraged. Advocates of participatory democracy argue that participation is synonymous with power and, hence, that social apathy should be discouraged. Adult educators' traditional concern for participation will be heightened as policies flowing from principles of lifelong education are adopted. It also is apparent that lifelong education and the future of adult education will be inhibited if researchers cannot create and test new ways to involve lower socio-economic groups in learning and education.

In most parts of the world, participation in adult education could be dramatically increased and socio-economic barriers diminished by passing legislation to make better provision for satisfying adult learning needs, for example, paid education leave, "educredits," entitlement, and improved opportunities for informal education. In other words, the extent to which participation remains a "problem" for adult education depends partly upon the attitudes of governments and policy-makers. In turn, policy-makers and practitioners depend upon researchers to provide reliable and valid

information concerning adult education phenomena. Hence, the need to conduct significant participation research will remain. Moreover, because adult education is moving from marginality to centrality, research findings will be more directly linked to policy than has been the case in the past. Thus, it becomes essential to eliminate conceptual and methodological problems that have weakened research on participation in adult education. Researchers should question the extent to which more descriptive clientele surveys are required. They should employ multivariate paradigms which portray variable interactions impelling people into and away from adult education. They should attend to models such as those provided by Boshier (1973), Knox and Videbeck (1963), and Miller (1967), which view participation as a transaction between variables.

STUDYING PARTICIPATION

Knowles (1973) listed six phases associated with development of fields of practice: definition, differentiation, standard-setting, technological refinement, respectability and justification, and understanding the dynamics of the field. Early meetings of the Commission of Professors of Adult Education (1955, 1957) were primarily concerned with definition and differentiation. Considerable effort was expended on formulating fundamental concepts for the identification and classification of adult education processes (Verner, 1962) and on developing strategies to measure the magnitude of the adult education enterprise. In a project resulting from Commission activities, Brunner, et al. (1959) observed that the voluntary nature of adult education makes participation a major problem because of the failure of many people to take advantage of opportunities provided. They noted the need to conduct experimental research with "differing groups, using varied approaches, materials and teaching methods" in order to facilitate participation.

Ex Post Facto Research

Despite these and other exhortations, attempts to facilitate understanding, prediction, and control of participation behavior have typically involved *ex post facto* and not experimental research. As Dickinson and Blunt (1979) noted,

the focus of adult education research over the last twenty years has been concerned with describing the extent and nature of the enterprise. They noted that an inevitable consequence of this emphasis has been the predominance of survey methods over other strategies employed to acquire or create knowledge. Even Hudson, as far back as 1851, noted that the public should be placed in possession of such facts as can be collected in order to afford a just estimate of the nature and extent of the efforts of adult education.

Participation surveys will continue to help shape local and national adult education policies, to identify "target" clienteles for adult education institutions, to establish the extent to which institutional clienteles overlap, and to identify potential participants not now involved in adult education. Although diverse types of surveys are attempted, they can still be classified into the categories used by Brunner et al. (1959):

- Studies of participants in particular institutional programs
- Comparative studies of participants in different programs
- Community studies based on sampling to determine the extent to which particular programs reach various segments of the population
- Studies comparing participation in adult education in corresponding samples drawn from selected communities
- State or province-wide studies of adult education participants in particular institutions or programs
- National studies of participants in one or more types of adult education institutions

Some adult education institutions collect participation data for purely administrative purposes. These studies have little or no impact on the discipline or agencies other than the agency conducting the survey. However,

other participation studies, such as the massive project conducted by the National Opinion Research Center (NORC) have had considerable impact on researchers, politicians, and practitioners. In fact, the NORC study (Johnstone and Rivera, 1965) was cited in the journal *Adult Education* more often between 1968 and 1978 than any other book or article (Boshier and Pickard, 1979).

Many of the early clientele surveys established benchmark data which demonstrated the nature and extent of the adult education enterprise; however, few proceeded with what Knox and Videbeck (1963) called an "analytic eye." Most were atheoretical. They failed to capture important variable interactions which determine participation. They also did not lead to properly conceived experimental research designed to dismantle barriers which impede or create circumstances which enhance participation. Despite the exhortations of Knox and Videbeck (1963), researchers have largely been unable to view participation within a conceptual framework which encompasses the total range of activities in which individuals participate. Few attempts have been made to go beyond reciting correlations between static variables and participation. Relationships between participation in adult education and other closely related domains remain largely unexplored. Furthermore, despite the promise of "ecological" approaches mentioned by Brunner et al. (1959) nearly twenty years ago, few researchers seem attracted to powerful multi-variate paradigms which have the potential to capture the reality of why people participate in adult education.

Johnstone and Rivera's (1965) very comprehensive study was an explanatory survey which provided a model for other researchers. As one of the best adult education participation surveys performed, it demonstrated the magnitude and dispersed nature of adult education. Yet, despite these exemplary qualities, it resulted in a bookload of contingency tables and frequency counts which failed to accurately represent variable configurations which impel people into or away from adult education. The analysis portrayed participation as stemming from variables such as age, country of birth, occupation, religious affiliation, and so on. Although tables showed variables in three or four dimensions, the analysis was not sufficiently focused on variable interactions, and the researchers eschewed powerful

parametric statistics in favor of less powerful non-parametric approaches. Although powerful multi-variate paradigms have emerged since the NORC data were analyzed, Johnstone and Rivera could have employed regression, factor, or other multi-variate statistical analyses. Furthermore, their variable-by-variable analysis created a situation whereby other researchers and practitioners have drawn what might be erroneous conclusions from the NORC survey.

One example concerns the "typical" adult education participant. In *Volunteers for Learning*, Johnstone and Rivera (1965) described the typical participant in these terms:

> ...as often a woman as a man, is typically under forty, has completed high school or more, enjoys an above average income, works full-time and most often in a white-collar occupation, is married and has children, lives in an urbanized area but more likely in a suburb than in a large city, and is found in all parts of the country, but more frequently in the West than in other regions. (p. 8)

This participant profile was not based on a study of variable interactions. Indeed, it is possible that no participant in their sample manifested all of the characteristics listed in the profile. There are ways of generating conceptually acceptable descriptions of the participants and nonparticipants. If the dependent variable is dichotomous, a discriminant function analysis would create variable combinations used to classify participants and nonparticipants. The percent of the sample correctly classified would measure the extent to which variables used account for variance in participation. If the dependent variable is continuous, there are procedures to reveal the separate and interactive effects of independent variables.

Participation appears to occur as a function of interactions between psychological and social variables and opportunities presented by institutional or noninstitutional arrangements for education. Variables such as those studied in the Johnstone and Rivera and other surveys account for some variance in participation. But relationships between participation and single social or demographic variables

are rarely powerful enough to persuade adult education administrators to change policies. Furthermore, the atheoretical nature of the early clientele surveys ensured that they had limited long-term utility. Participation occurs as a function of variable interactions, and therefore researchers should employ multi-variate paradigms. Indeed, if Johnstone and Rivera's data were reanalyzed within frameworks provided by multi-variate paradigms, it is possible that the effects of some hallowed and allegedly powerful variables might disappear.

Variable Interaction

About the same time as the NORC analysis was conducted, Knox and Videbeck (1963) published a paper which should have influenced the direction of participation research. These authors noted that previous research had largely been descriptive. They outlined the extent to which adult educators were conducting clientele surveys, and, most importantly, they observed that participation occurs as a result of an interaction between an individual and his or her environment. In their theory of "patterned activities," they distinguished between discrete actions (such as going to a store, reading a newspaper, and eating dinner) and "recurrent behavioral sequences" in which individuals engage. "Patterned participation" occurs not because of single psychological or environmental variables but rather as a result of person/environment transactions. The theory of patterned participation

> ...incorporates within a single conceptual scheme not only psychological orientations but also social systems and environmental factors in such a way that they can be jointly brought to bear in examination of variations in participation. (p. 105)

Participation was viewed as resulting from an interaction between an individual's "subjective orientation" and the "objective organization or behavioral settings contained within an individual's life space." Hence, "participatory responses" would be critically affected by changes in an individual's life-space or life-circumstance. Knox (1977) subsequently organized a book around this idea but, in a 1963 research report, argued that the transactional orientation requires that variables impelling participation be

considered "in concert rather than singly." In the accompanying data analysis, the interactive effects of five "statuses" (sex, socio-economic status, martial status, employment, number of children) were considered. This study was available four years before Miller (1967), presented his force-fields, and was a precursor of later attempts to portray participation as a phenomenon with multi-variate origins.

Most of the early participation surveys focused on institutional forms of adult education, but, during the last decade, the promotion of lifelong education has spawned investigations concerning participation in self-directed adult learning projects (e.g., Tough, 1971) and concerning education occurring in noninstitutional settings. Unfortunately, proponents of self-directed learning have employed research methodologies which largely emulate the weakest features of traditional participation studies. The utility of their research also has been inhibited by a failure to adequately reflect variable interactions which determine self-directed learning behavior. Researchers (largely graduate students) are continuing the practices of their professors, producing contingency tables and correlation coefficients that show the strength of association between frequency of learning projects and such variables as age, occupation, and socio-economic status. Few employ anything as complex as a regression equation or Automatic Interaction Detector (AID) (Sonquist et al., 1971) algorithm capable of identifying variable combinations that cause some participants to engage in many adult learning projects and others to engage in only a few. It is perhaps a forlorn hope to expect that researchers will use powerful parametric and multi-variate statistics. Proponents of self-directed learning sometimes denigrate institutional forms of adult education, but, in their research, appear trapped in the same analytical dead-end as their "traditional" colleagues.

DROPOUT

In 1814 Thomas Pole recommended that "conductors" of adult classes visit the homes of dropout participants "to prevent the learners from relaxing their attendance." Pole might be surprised to learn that the problem is just as acute

today and likely to worsen as advocates of lifelong education experiment with new and untested methods of delivering educational services to adults.

Dropping out can be viewed as related or unrelated to nonparticipation. From one perspective, dropout can be viewed as a continuation of nonparticipation; thus, variables which impede participation are assumed to be the same as or similar to those that cause dropout. An alternative view portrays dropout occurring as a function of variables that do not impel participation. With few exceptions (e.g., Sainty, 1971), dropout research also has been inhibited by overattachment to bi-variate contingency tables and faulty conceptualization. Although dropouts often "explain" their behavior by reference to single variables such as "the weather," "tiredness," "transportation difficulties," and so on, most practitioners sense that, like participation, dropping out is a complex and subtle process that rarely has single-variable origins. It occurs as a function of interactions between several variables.

The first researchers seeking to understand, predict, and control dropping out adapted analytical strategies which failed to capture important variable interactions. Few, if any, portrayed dropout as a phenomenon occurring as a function of an interaction between more than two variables. It appears that the earliest researchers attributed the "blame" for dropout to internal participant variables. People drop out because they lack intelligence, are too anxious, lack motivation, and so on. Studies conducted from this frame of reference yielded some significant correlations. But when each variable was considered separately, it did not account for sufficient variance to warrant administrative action. Program planners were unwilling to screen participants using psychological variables that account for trivial amounts of dropout variance. When this frame of reference yielded little of practical relevance, researchers turned to social variables. When these were apparently exhausted, the "blame" shifted to environmental variables. Researchers tried to explain dropout variance using variables such as transportation difficulties, distance travelled, class size, weather conditions, and so on. Environmental variables also accounted for some dropout variance, but the amount was insufficient to justify administrative action.

Toward the late 1960s it became apparent that participation and dropout research was approaching a dead-end. It was largely atheoretical, impeded by lack of common definitions identifying the phenomena, complicated by the burgeoning interest in self-directed learning and education occurring in noninstitutional settings, and studied with analytic strategies that failed to portray variable interactions. The atheoretical nature of the research was partly mitigated by the massive nature of the data collection enterprise. Johnstone and Rivera gathered data on 24,000 adults, 1,900 married youths, and 11,554 children. Boshier (1970; 1971; 1971a) secured more than one million items of data from 3,000 New Zealand adult education participants. In California, London et al. (1963) administered questionnaires to or conducted interviews with 4,929 persons. But it was apparent that new directions were needed.

NEW DIRECTIONS

When the present writer conducted pilot studies (Boshier, 1969) on aspects of participation and dropout in New Zealand, the need to do two things became obvious: (1) check the cross-cultural generality of findings derived from overseas participation surveys such as those by Johnstone and Rivera (1965), London et al. (1963), Hanna (1965), and Dickinson (1966); and (2) develop a theoretical model and instrumentation that would portray the phenomena of interest in a manner more closely approximating reality than had been the case previously. The isolation of New Zealand facilitated rather than impeded the process, since there was no national adult education research tradition to emulate. Thus, it did not take much effort to conceive of participation and dropout as involving a transaction between participants and environments. This conception was not novel; it had been stated earlier by Knox and Videbeck (1963) and had provided the foundation for Beal's (1956) analysis of "dynamic" determinants of participation.

The task force confronted also was assisted by Miller's (1967) force-field analysis which provided a framework for understanding and controlling participation behavior. Using Lewin's (1936) field theory, Miller suggested that participation in adult education occurs as a function of interactions between personal needs and social structures.

When needs and social structures both "push" the participant toward an educational objective, participation in programs relevant to that objective is likely to occur. When needs push a person toward an objective but are not complemented by sustaining social structures, participation behavior will be nonexistent or erractic. When needs are low and social structures strong, participation will be high but will drop off after an initial period. When personal needs and social structures conflict, participation will depend upon the strength of the social force -- but there will be tension within the program. Miller summarized the personal needs and social forces assumed to influence the participation behavior of people from four major socio-economic groups. His force fields were intuitive attempts to show how personal needs and social class values and structures combined to determine participation behavior. This was an important analysis because it stressed the interaction between internal and external variables. It also showed that an increase in forces pushing toward or a decrease in forces pushing against participation could upset equilibrium and change behavior. The force-field analysis has not led to much empirical research but seems well suited to magnitude estimation scaling techniques developed in psycho-physics (Stevens, 1951) and recently applied to adult education (Blunt, 1977).

Miller's analysis was congruent with theoretical and empirical developments in psychology and organizational behavior that became evident during the 1960s and early 1970s. Miller (1967) indicated that he was not attempting to build a theory, noting that "we can do little more at this point than sketch some hypothesized relations among the variables which appear to have some bearing" on participation (p. 1). Although Miller never completed the task, his analysis remains one of the better theoretical models available to adult educators.

Congruence

In addition to Miller's analysis, other models have helped shape the notion of congruence eventually employed by Boshier (1973) in a study of participation and dropout. For example, Festinger (1957; 1964) showed that cognitive dissonance is an uncomfortable and debilitating psychological state which humans try to avoid or resolve quickly.

Attitude researchers (e.g., McGuire, 1968; Scott, 1968; Simons et al., 1970) showed that the extent to which people are willing to change attitudes varies as a function of the degree of perceived similarity between themselves and the change agent (hence, the advertising industry's use of the "plain folks" device). Researchers investigating interpersonal attraction (e.g., Lott and Lott, 1965) produced results resembling those in the attitude-change literature. Transactional psychologists performed an array of experiments (e.g., Ames, 1951) throughout the 1950s and 1960s, showing that an apparently veridical view of the world is distorted by internal psychological variables.

Lewin (1936) earlier had warned that scientific activities must have regard for whole situations, that is, the state of both person and environment. He wrote that "this implies that it is necessary to find methods of representing person and environment in common terms as parts of one situation" (pp. 12-13). Stern (1970) later noted that while the need for a holistic or transactional position was often stated, few researchers had managed to bridge the gap between abstract theorizing and formal operations. Herein rests the weakness of the Miller (1967) force-field; conceptually it was suggestive but not converted to research operations. In psychology, attempts to convert transactional frameworks into formal operations are found in the need/press model of Murray (1938), the person/environment congruence notions of Stern (1970), the theories of attitude structure and change (Heider, 1958; Newcomb, 1959), and the writings of cognitive consistency theorists who demonstrated the human preference for stability, homeostasis, balance, consistency, and consonance. Almost any of these formulations represent a body of theory that could be used as a tool to facilitate understanding, prediction, and control of adult education participation and dropout behavior. [Note: Theory has both tool and goal functions. Theory development is the ultimate goal of science, but theories are also used as tools to guide the research process. For a further discussion of this distinction, see Marx (1970); and for its relevance to adult education research, see Boshier (1978b).]

The notion of congruence finally employed by the writer was primarily based on the personality theories of Rogers

(1959) and Lecky (1945) which elevated the self-concept to a central position. The self-concept, like any group of attitudes held by a person, is subject to organizing principles. New Zealand psychologists (Wilson, 1973; Bagley, Wilson, and Boshier, 1970) used factor analysis to show that social attitudes are organized into a general factor. A person who favors the death penalty also has harsh and punitive attitudes towards immigrants, minorities, and so on. Attitudes are internally consistent. An individual's self-concept is organized in a similar fashion. As Lecky (1945) noted:

> ...all of an individual's values are organized into a single system, the preservation of whose integrity is essential. The nucleus of the system, around which the rest of the system revolves, is the individual's valuation of himself. The individual sees the world from his own viewpoint, with himself as the center. Any value entering the system which is inconsistent with the individual's valuation of himself cannot be assimilated; it meets with resistance and is likely, unless a general reorganization occurs, to be rejected. (p. 82)

According to Lecky, the human organism is a unified system with two sets of problems -- to maintain inner harmony *and* harmony with the environment. The second problem can be resolved only by keeping interpretations consistent with experience. Similarly, in Murray's (1938) need/press model a *dissonant* relationship arises in an unstable needs/press combination which must lead either to modification of the press in a more congruent direction or to a withdrawal of participants -- unless artificial equilibrium is maintained through coercion.

It appeared that dropout from adult education involves person/environment transactions. Earlier researchers attended to appropriate variables, but few of the analyses captured variable interactions. A similar situation led Knoell (1966) to exhort researchers to have more regard for environmental press as a factor in dropout from college and Pervin (1960) to stress the importance of achieving a match or fit between participants and educational environments. An earlier observation by Cronbach (1957) seemed

particularly apt. He noted that "if for each environment there is a best organism, for every organism there is a best environment" (p. 679). There was nothing novel about this orientation; however, developments in high-speed computing, advances in multi-variate statistics, and exhortations to view the world from ecological perspectives made it easier to study person/environment transactions than had been the case throughout the 1950s.

At a broad level, the entire field of adult education is founded on the notion of congruence. Adult educators are supposed to be democratic; they diagnose needs and plan programs congruent with participant needs and expectations. As applied to participation and dropout, congruence refers to the goodness of fit between a participant and his or her educational environment. In operations which flowed from this conceptualization, the focus was on the extent to which participants perceived themselves to be congruent with other participants and their instructor (Boshier, 1973). It was found that participants who dropped out of adult education classes perceived themselves to be significantly more incongruent than participants who persisted.

The semantic differential concepts and scales used to investigate this conceptualization do not capture the full significance of congruence states observed in most adult education environments. The focus in the initial attempt (Boshier, 1973) to employ this notion was on congruence states that develop between people (participants and instructors) in adult education environments. Although crucial, these psychological congruence states are sometimes transcended by the dismal nature of physical facilities provided for adult learners. An unfortunate concomitant of policies designed to implement principles of lifelong education is that adults often are required to sit in classrooms and use furniture designed for children. Whereas proponents of community education regard the education of adults as a desirable use of school facilities, many adults feel incongruent in child-oriented environments. It is little wonder that adults, as volunteers for learning, vote with their feet.

Recent Research

Researchers have been slow to conduct studies based on force-field analyses or the notion of congruence. But one

project (Boshier and Baker, 1979) involved an attempt to conduct research in a manner conforming to some of the exhortations described above. These writers acknowledged that attempts to facilitate the participation behavior of lower socio-economic groups could be enhanced through the weakening of forces pushing against and strengthening of forces pushing for participation. Stated another way, it was suggested that participation could be facilitated by inducing congruence between participants and educational environments. The most powerful results would accrue from strategies simultaneously modifying both the "participant" and "environment" ends of the participant/environment transaction. Research of this nature would require major controls and interventions which many adult education organizations might be unwilling to tolerate.

Boshier and Baker chose to modify adult education fees. In support of the research strategy adopted, they noted a persistent belief in the fact participation rates can be changed and new clientele attracted by the modification of such major environmental variables as fee policies. The belief stems from clientele surveys which habitually distinguish participants from nonparticipants according to variables related to socio-economic status. Fees act both as a psychological and a financial barrier to participation. Poor people do not participate because they are unwilling to pay for something which they perceive as being of low value (psychological barrier); they literally cannot afford money to buy educational services (financial barrier). The situation for members of the middle or upper socio-economic groups is one where moderate or small fees are not a financial hardship but, acting jointly with other variables, represent a psychological barrier to participation. Following this line of reasoning, it could be argued that non-fee courses would attract more participants (of all socio-economic levels) than would fee courses. It also could be argued that because a major financial barrier had been removed, the non-fee courses would attract a greater proportion of people from the lower socio-economic groups than would fee courses.

In developing the problem, the researchers noted that despite the urgency accorded demands for democratization, educational entitlement, paid educational leave, and other policies flowing from principles of lifelong education, few adult educators have experimented with free programs

because their marginality usually requires fee income to support staff and other services (Clark, 1958). Boshier and Baker's project was conducted in an institution where administrators were willing to sacrifice fee income for research purposes. The project was concerned with studying the effects of fees on adult education participation patterns (the number of people enrolled) and on the characteristics of participants attracted to fee and non-fee classes. The study was significant because: fees can be systematically controlled by both administrators and researchers, the effects of fees on enrollment patterns are largely unknown, and educators are under pressure to implement policies congruent with the notion of educational entitlement. Accompanying pressure for entitlement is a concern that elimination of fees might benefit only the traditional, that is, "well-heeled," participant. The task of the project was to remove fees systematically from one-half of the courses in an entire school board adult education program in an attempt to examine enrollment patterns; the number of participants attracted to fee and non-fee courses; and the social, demographic, and motivational characteristics of participants attracted to such courses.

Subjects for this study were 721 adults enrolled in fifty-two courses sponsored by two British Columbia community schools. The design resembled a quasi-experimental design, involving random assignment of subjects to treatment and control groups. However, courses -- not people-- were randomly assigned to a fee and non-fee condition. The situation can be portrayed as follows:

$$R_c \qquad X_i \qquad O_1$$

$$R_c \qquad X_{ii} \qquad O_2$$

This diagram employed Campbell and Stanley's (1963) nomenclature. (R_c) indicates the random assignment of courses to a fee (X_i) or non-fee (X_{ii}) condition. (O_1) and (O_2) were observations of participants undertaken during the second session of their fee or non-fee course. Subjects were not randomly assigned to fee or non-fee courses; they selected their course (presumably) on the

basis of their own needs and interests and information contained in the brochure. In Campbell and Stanley's nomenclature, R means randomization of subjects to treatment groups. To reinforce that, in this study, courses and not subjects were randomized; the letter "c" is used to indicate randomization of courses. (0_1) and (0_2) involved administration of the Education Participation Scale (E.P.S.) (Boshier, 1971) and a questionnaire eliciting "threshold" fee information and data on twenty-seven social and demographic variables.

Although the randomization process resulted in the advertising of an approximately even number of fee and non-fee classes, nearly 500 of the 721 participants opted to enroll in non-fee courses. There were 499 (69.21 percent) participants in non-fee and 222 (30.79 percent) participants in fee courses. The 499 non-fee payers were enrolled in thirty-one courses, with an average of 16.10 participants in each course. The 222 fee payers were enrolled in twenty fee courses, with an average enrollment of 11.10 participants per fee course. (Nine fee courses and only one non-fee course were cancelled because of insufficient enrollment.) Thus, non-fee courses attracted greater numbers of participants, had a higher enrollment per course, and were less likely to be cancelled than were fee courses. It appears, then, that the absence of a fee is a powerful inducement which influences gross enrollment rates.

A single variable analysis showed that on six ordinal (or interval) variables and three nominal variables, fee-and non-fee-paying participants differed significantly. But, in general, the analysis resulted in a fee-paying participant "profile" which strongly resembled the "profile" of the typical non-fee-payer. In pursuit of variable configurations that would more adequately predict fee status, a decision was made to employ the multi-variate algorithm embodied in the AID3 sub-routine of OSIRIS. AID3 is a regression-like procedure employing independent variables in a stepwise manner in attempts to account for variance in a dependent variable. It has several features which make it more attractive than the usual stepwise regression procedures. Apart from its ability to detect variable interactions, AID3 was well suited to the problem because it can accept a mixture of nominal, ordinal, and interval data as input. It can cope with variables which have an

effect mediated by other variables. A total of 35.1 percent of the variance in fee status was explained by the configurations of variables in the AID3 analysis. Of the seventeen independent variables split, the five most powerful predictors of fee or non-fee status were "day of the course," "family income," "neighborhood or residence," "types of accommodation," and enrollment for "cognitive interest." These five variables in their various configurations accounted for 19.6 percent of the variance in fee status.

Although the free courses attracted significantly more participants than did those which required fee payment, and although more than a third of the fee-status variance could be explained, the non-fee participant group was not significantly more "disadvantaged" than the fee-paying participant group. This study is cited here as an example of research conducted in the general frame of reference suggested by Miller's force fields and Boshier's notion of congruence. The results must be treated with extreme caution, and it should not be used to debunk free courses because the study involved a leisure-centered adult education program where the mean fee was only $9.10. Until further research is conducted, it would be prudent to assume that the situation could vary as a function of program type, fee size, and other variables. Nevertheless, the results suggested that attempts to increase the participation behavior of lower socio-economic groups will probably require modification of both person and environment variables that make up transactions which impel or inhibit participation.

OUTSTANDING ISSUES

Since the heyday of the large clientele surveys, the nature of the participation problem has changed. Powerful multivariate approaches, advances in statistics and computing, and the adoption of ecological approaches (Warren and Warren, 1977) to social research have emerged and should engender novel and conceptually sound ways of viewing participation. Nevertheless, the changing status of adult education (from marginality to centrality), the importance ascribed to non-institutional settings, rhetoric extolling the virtues of self-directed learning, lack of attendance

to canons of social research, and reluctance to conduct experimental research are still impeding progress. One continuing problem stems from an inability to define the phenomenon of interest. Another stems from the need to conduct experimental participation research.

Problems of Definition

One of the first tasks tackled by the Commission of Professors of Adult Education (1955; 1957) concerned the need to identify fundamental concepts of adult education. The systematic collection of data about and the study of participation in adult education is dependent upon the ability to define adult education. Verner (1962) provided an operationally useful, if somewhat contentious, definition--adult education is planned and organized, provided by some social instrumentality, and has as its purpose the facilitation of adult learning. Verner's definition has been modified since it was first proposed, delimiting boundaries around the phenomenon of interest and acknowledging the importance of self-education (see Dickinson, 1978).

Verner's definition rests on an important distinction between education and learning. Learning is an internal psychological process. Education involves the systematic arrangement of external conditions for learning. Despite this crucial distinction, there has been a tendency to debunk the notion of adult education because it is "tired" (Lowe, 1978); implies an elementary, secondary, and adult education sequence; or only denotes learning which occurs in institutional settings. Some definition problems stem from attempts to place adult education concepts and processes on single continua, with self-directed learning and institutional education discussed as if they formed the extreme ends of a single continuum. The situation can be clarified by distinguishing between education and learning, self-directedness and direction-by-others, institutional and non institutional settings for education, and program planning and instruction. Little (1978) acknowledged these distinctions and has shown that education occurs in both institutional and noninstitutional settings, that both institutional and noninstitutional forms of education vary in the extent to which the learner is self-directed, and that adult education is not synonymous with adult learning.

Some proponents of self-directed learning want to extend the boundaries of adult education to encompass all human performance and behavior change. It is conceptually unsound and operationally impossible to encompass all casual and incidental learning occurring through exposure to mass media, friends, and chance encounters under the rubric of "adult education." Furthermore, "conclusions" derived from dubious research instruments and designs impede progress and damage the practice of adult education. Statements concerning the extent of self-directed learning based on possibly unreliable and invalid "depth interviews" should be treated with considerable caution. "Depth interviews" which require a respondent to report on learning projects conducted fifty years ago should be disregarded entirely (see Boshier, 1978). Literature produced to buttress the notion of self-directed learning also evokes the following causes for concern: the authors allow emotional commitments to obscure crucial conceptual and methodological questions; researchers do not consider the extent to which instruments are reliable or valid; massive generalizations are made on the basis of interviews with few subjects; and there is little consistency in the way researchers define dependent and independent variables. The danger exists that the need to encourage self-directed learning will be submerged beneath methodological wrangles that must inevitably accompany attempts to synthesize relevant literature. Nevertheless, it is clear that researchers must and should attend to the participation behavior of learners who choose natural societal or non-institutional settings to engage in learning or education.

The definition problem is heightened by the emergence of new clients for adult or other branches of education. For instance, adults are returning to universities in increasing numbers. Are they engaged in higher education for adults, adult higher education, adult education, or higher education? Some tension in graduate departments of adult education arises from the fact that they teach adult education (as a subject) but operate within the constraints of a higher education institution. The same problem of definition applies to adults returning to high school. They are adults and involved in education, but the character of the processes employed suggests that those adults are more involved in youth education for adults than in adult education. These perennial issues are discussed in the

introduction to an Organisation for Economic Cooperation and Development (1977) study and a study by Little (1978). They represent key problems for participation research.

Need for Experimentation

Large-scale clientele surveys helped measure the magnitude of the adult education enterprise, alerted practitioners to processes which result in elitism, and eroded a persistent belief that education is necessarily synonymous with schooling. They also helped illustrate the institutionally dispersed nature of adult education (see Schroeder, 1970) and showed that adults learn from a variety of educators ranging from enthusiastic amateurs to paid professionals (Houle, 1970). Through surveys it was possible to describe the nature of adult education and to make predictions concerning variables which, if manipulated, might result in increased levels of participation. There is a strong survey tradition in adult education. Some graduate departments of adult education (such as the University of British Columbia) have conducted more than a hundred participation surveys. However, benefits resulting from large-scale surveys no longer justify the costs associated with conducting them. Participation in adult education can be established by surveying instrumentalities that provide adult education; however, so many agencies and institutions are involved that it is impossible to identify them all. As a result, "conspicuous" providers are surveyed, and the results are biassed or incomplete.

Several years ago, both Boshier (1973) and Douglah (1970) wanted to declare a moratorium on *ex post facto* participation research. Nearly twenty years ago, Brunner et al. (1959) stated that experimental participation research was needed. But there is little evidence to suggest that experimental research has filled the vacuum. *Ex post facto* research produced valid predictions concerning adult education participation; now it is time to identify and manipulate variables hypothesized to impede or enhance participation. If researchers are not satisfied with current theoretical models, they can proceed inductively through experiment. It would be desirable if future doctoral dissertations reporting participation research consisted of five or six experimental projects, each involving manipulation of one, two, or three crucial

variables in some sort of factorial design. If circumstances in the field constrain the logistics, one or more of the acceptable quasi-experimental designs (Campbell and Stanley, 1963) may be employed. Some *ex post facto* research is bound to continue. It should not be modelled on previous studies, such as Johnstone and Rivera, but should employ multi-variate approaches sensitive to variable interactions and the ecological foundations of participation behavior. Experimental participation research or well-designed *ex post facto* research represents a good opportunity for cooperation between researchers and practitioners.

In conclusion, it appears that adoption of lifelong education principles requires the systematic collection of adult education participation data. This task should be routinely performed by national, provincial, or state government authorities. Adult educators should certainly consult with government authorities concerning the conceptual foundations of questions to be included in census forms or other large-scale collection exercises. However, they should carefully consider the extent to which they should themselves undertake further large-scale descriptive research.

Finally, the difficulties and costs associated with large-scale descriptive research *and* an apparent inability to develop a commonly acceptable definition of the phenomenon of interest and new imperatives associated with adoption of lifelong education policies have created a situation which requires that scarce resources should be given to research where --

- the project is guided by or will result in a coherent theory or model which has utility beyond the immediate problem;
- the investigator intends to manipulate variables in an attempt to facilitate participation;
- the theory or model has the power to explain (and will lead to policies designed to ameliorate) the nonparticipation behavior of people from the lower socio-economic groups;

- the investigator proposes to employ an analytic strategy which reflects participation occurring as a function of variable interactions; and

- the theory or model employed is parsimonious, significant, and testable.

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THE OLDER ADULT LEARNER: A RE-EXAMINATION OF BASIC CONCEPTUALIZATIONS OF LEARNING

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An inquiry into the older adult cannot ignore the views society has towards aging. In one way or another, these views shape our thinking and, therefore, our research. There is one concern, particularly, that has influenced much of our thinking on aging, namely, death. Let us be simple and direct. As a culture, we are repelled by aging and frightened by death. There is ample evidence that illustrates in obvious and subtle ways, our attempts to postpone aging and to avoid the ultimate reality. Adult education has not escaped being drawn into this orientation.

There appear to be two opposing positions taken by adult eduactors on aging. On one hand, there are those who would have us be "hard-skinned" realists. We must face up to the fact that older adults cannot be expected to learn and perform as well as they did when they were younger. On the other hand, there are others who dismiss such a position as being without firm scientific evidence. In fact, they provide evidence to support claims that little, if any, difference exists in learning ability between older and younger adults. The central thesis of each position must be understood in order to move past the mistakes of each.

Educators and researchers who support the first position are realists. Their argument is straightforward. Growth and development can be pictured as a flat-topped mountain. Starting at the base, the beginning of life, the individual advances upward with increasing abilities until the summit is reached. It is attained at different times in different areas,but the pattern is consistent. The high level of performance is maintained for a time. Then a process of decline begins. The pattern in obvious. Individuals age, and in doing so, they progressively lose the abilities

that had been developed. Th realist's position can be recognized as the *decrement thesis*.

Educators and researchers who take the second position are romantics. Their position is not as unconditional as that of the realists. Aging obviously occurs but not in the universal and unalterable pattern that realists claim. They contend that, given certain conditions, no significant differences exist in learning ability between older and younger adults. This position can be recognized as the *retention thesis*.

Although the two theses appear to be opposing, in the final analysis, they are rooted in the same basic point of view of human development. Both operate on the assumption that the mental processes involved in learning are common to all adults over the life span. If this were not the case, romantics would reject the comparison between younger and older adults as inappropriate on the grounds that different cognitive processes characterize different age groups. They do not. They examine the variables of time, previous educational experience, training, and meaningfulness of the learning material.

I do not want to speculate on the motivations of those who pursue the second position. Their public position is clear for anyone to see. They reject the findings of the realists on the basis of what they view as inappropriate methodologies. Yet in principle, their unstated position accepts the decrement thesis as a correct theory in the final stages of life. This latter point is evident in the hypothesis of the loss of cognitive abilities prior to death (Birren, 1970).

There is a third position quite different from the two stated above. The two former positions assume that cognitive processes are the same throughout the life span. Realists argue that the cognitive processes decline as adults age. Romantics posit that this decline is not a function of aging *per se* but of other conditions and circumstances. Neither position considers the possibility that older adults think in a different manner than do younger adults and that this different mode of thinking could account for much of the variance between the two age groups. The failure to perceive this idea, in light of existing theory and observations, is surprising. Piaget's work

should have evoked the idea. The growing body of knowledge on human development based on a life-span perspective should have provided evidence for such an idea. It was Schaie (1977-78) who finally wrote about a stage theory of adult cognitive development. He is cited not because he was the first to propose the idea, but because he was the first among the recognized authorities writing today who proposed the idea in a published paper.

Before we explore the third position, we should examine several methodological aspects of research on learning by older adults. First, we should review the quality of the questions raised to guide research endeavors. Second, we should consider the appropriateness of techniques for measuring achievement in learning. We should then examine the methods and findings of several research studies. We must realize the obvious fact that the questions we ask initially determine the direction of our inquiry. Therefore, the questions should be carefully examined. They could be wrong; they may be based on inadequate observations, erroneous assumptions, or faulty reasoning. Without careful examination, a line of research may be pursued that, at worse, would mislead us and, at best, would prove to be fruitless.

To consider the issue before us, it appears that the realists have initiated their studies by asking this question: Does the decrement in cognitive abilities present a serious barrier to learning for the older adult? Evidence on cognitive decrement can be traced to two sources at the empirical level. First, teachers have stated that they have found it is easier for younger people to learn. They support their claims with case studies and test scores. The second source is based on a line of reasoning grounded in a common observation. It is obvious that if aging occurring over the life span results in observable physical decrement, then it is reasonable to conclude there must be a concomitant cognitive decrement.

If we examine these conclusions as we should, we find that the proposed inquiry should not begin with the question: Does the decrement in cognitive abilities present a serious barrier to learning for older adults? The research instead should begin by examining questions on cognitive stage development.

The decrement thesis predicts that older adults will have increasing difficulties in learning. Research should begin by testing this proposition. Accordingly, the primary question should be: Do older adults have serious difficulties in learning? Some may ask: In comparison to whom? It is this line of thinking that lies behind the research comparing young and older learners. The question need not be a comparison question between age groups. We do not see the question as an "age question" when we are teaching elementary or high school students. Yet, when some educators see older learners having difficulties in grasping new learning, the issue of comparing is raised. Why did we not look at the difficulties the older adult was experiencing as we would have done with a young learner? Obviously, we are deeply concerned with the process of aging and would prefer an answer in this area rather than in the area of learning and instruction. Unfortunately, we find little research on instruction as a part of the literature on the decrement thesis dealing with learning.

We must be very careful, at this point, not to equate learning with achievement. This idea must be fully understood, for it is crucial to the criticism of much of the research on the decrement thesis. Equating learning and achievement has lead to fallacious conclusions and detrimental implications. In large part, this problem exists because researchers focused on the comparison between age groups rather than on the difficulties the learners were experiencing. The demarcation between learning and achievement is crucial.

Let us begin by taking the situation in which an adult has been given a set of facts to learn, for example, and then tested on whether he or she is judged on the extent of learning by the number of facts recalled. This is a measure of the achievement of the task, but it is only inferentially a measure of the individual's learning. It could be argued and, indeed, it is proposed that this is the correct meaning of learning. That is, learning is defined by the level or degree of achievement a learner attains in mastering a given task. That appears

to be a reasonable position. This position can be described in the following illustration. We set out to help an individual understand how an electric motor works. After a period of time spent on examining the motor and seeing how the various parts function, he or she can correctly explain how the motor works. There is no argument here that the ability to explain how the electric motor works is clear evidence that learning has taken place. The learning is reflected in the achievement.

Let us take another situation. An adult is requested to learn a paired set of words, e.g., "handy" is paired with "tree," "happy" with "red," and so on. This type of task is frequently used in so-called learning experiments and is known as a paired-association learning task. The learning studies which employ paired-association tasks follow an established design. In general, the experiments take the following pattern. After a given amount of time in studying the paired-associates (i.e., handy-tree, happy-red, etc.) the adult is asked to engage in an activity unrelated to the learning task. Such activities are introduced to provide an experimentally controlled period between learning and recall. At the end of this unrelated activity, the adult is given one member of the paired set of words and is asked to recall the missing word that forms the pair. The measure of the person's ability to learn is determined by the number of correct pairings recalled.

The defense of such an approach is based upon the proposition that the amount of achievement is in direct correspondence with the measure of the ability to learn. In simplest terms, achievement is a measure of learning ability. This position is indefensible. The conclusion that can be drawn from such investigations is far narrower than has been asserted. The conclusion that can be affirmed is that the achievement scores give a reading of the individual's learning of a specific task at a particular time. This realization can be stated in another way. In such investigations, there are only the most tenuous inferential relationships which would allow us to speak about the individual's ability to learn, except as learning is restricted to that specific task at that particular time.

I am not rejecting the idea accepted earlier that learning is determined by measuring achievement. The crucial point is that there must be a direct and testable link between measures of achievement and statements about learning

ability. By *direct*, I mean links which can withstand the most rigorous attempts to falsify the stated linkages. The point that is being made here can be readily illustrated by reexamining the paired-associate learning task described above. Adults may be learning a great deal during the period when they are supposedly busy with learning the paired-associate task. The adults may be gaining insights about themselves, developing perceptions about such research studies, and even getting to understand the motives of the researcher. The measurements designed for the paired-associate learning will not provide any evidence of these learnings. However, it is reasonable to propose that there is a good possibility that these other types of learning could be identified in discussions with the adults following the experiment.

The above discussion has been aimed at underscoring one major idea: learning and the measurement of achievement of a learning task are not always synonymous. That is, learning (as an outcome) may occur as a result of intentionally directed learning (as a process), but learning outcomes may occur which are quite apart from what was intended. In other words, little or no learning may take place on the content that was intended to be learned. Even when achievement measures can be directly related to learning behaviors, such measures should be thought of only as measures of specific aspects of the learning which may or may not have been taking place. If we keep in mind the distinction between learning and achievement, then we can examine the research studies on adult learning without equating learning with achievement measures. The failure to keep this demarcation clear may lead to unwarranted assertions and erroneous conclusions.

There is a growing body of literature on the older adult learner. The extensiveness of this research literature is beyond the scope of this paper. Yet, it is necessary for us to reexamine this literature in light of both the third position that has been proposed and the issues that have been set out. Since a comprehensive review is not the goal, exemplars of the type of research will be presented briefly.

Hutchison's (1974) study serves as an exemplar of a group of studies that attempted to structure a rigorous experimental design. He compared two groups, one composed of older

adults (mean age of 73.9) and the other of younger adults (mean age of 19.7) on a paired-associate learning task. The younger group did significantly better than the older group. There have been several similar studies, all of which can be criticized for failing to find out about the perceptions, motives, values, and cognitive processes that may have had great effects on the behaviors of older adults. To speak about learning under these conditions is presumptuous at best.

Witte and Freund (1976) investigated stimulus concreteness and presentation method with a younger group and an older group of adults. In a comparison of the two, the older adults did not perform as well as the younger group. The paired-associate technique was used. The study, however, does represent an advance over those which simply gather data on achievement. Here we find the investigators examining methods of presentation. Such studies focus our inquiries on variables that should provide insights into the achievement behaviors of learners, young and old.

There are few studies on the problem-solving behaviors of older learners. Young's (1966) study is notable as one empirical study in this area. She compared a young set of subjects (median age 33 years) with an older group (median age 67.5 years) on a series of problem-solving tasks. Problems were posed to develop solutions for the operation of an experimental mechanical device. The performance of the older group was inferior at every level of problem-solving. The older subjects also were characterized by a high degree of redundancy (making similar types of unproductive behavior) and an inability to apply a solution strategy which was repeatedly demonstrated. It is unfortunate that Young did not attempt to find out why these older adults had such difficulties. From our knowledge of older adults, it seems likely that there could have been concern with and rejection of the experimental mechanical device.

Variables which may affect performance have been investigated by Okun and DiVesta (1976) who studied cautiousness as a condition affecting performance in older adults. They reported that older adults appear to choose relatively easy tasks in order to protect themselves from self-evaluation. This, however, was a conjecture and not a finding. The

major finding is that older adults, given the type of task the researchers administered, were more cautious, that is, they chose less difficult tasks. The conjecture may be correct; however, one should be cautious in over-generalizing.

Botwinick (1966) structured an investigation of cautiousness which showed much awareness of the psychology of the aging individual. He presented older adults with twelve cases of life situations that older adults face. They were asked to check the probability of success that they would want before they would select a particular solution or line of action. This design shows a sensitivity to the meaningfulness of a task to a given individual. This condition has not been characteristic of the majority of the studies of the older adult learner.

A number of studies attempt to control for or at least report on several concomitant variables, e.g., health, economic status, and education. Labouvie-Vief (1976) has spoken to several shortcomings of the research on aging. She has discussed differences due, to generational conditions, distance from death, motivational factors, and learning of congnitive skills. Among other pertinent variables, it is interesting to note that she did not specifically address the possibility that different congnitive processes could be operating at different periods in adult life. Schaie's article postdated Labouvie-Vief's review and, therefore, was not available for Labouvie-Vief to review.

As noted, Schaie was the first writer in the circle of recognized authorities to propose the idea that there may be stages of adult cognitive development. If such a conjecture were corroborated, we would have a basis for understanding some of the differences that were found between the young and older adults. We may have been not only selecting problems more appropriately designed for younger adults but structuring our expected answers from the view of a younger problem-solver. Now it is an accepted fact that we do not expect young children to think in the manner characteristic of a young adult. Why, then, do we find it difficult to consider the possibility that the older adult thinks in a different manner than younger adults?

A study by Labouvie-Vief and Gonda (1976), designed to test the effects on giving instruction to older adults, suggests the possibility of corroborative data for the

cognitive stage conjecture. They provided training to strengthen covert self-monitoring strategies in dealing with reasoning problems. Significant increments in intellectual performance were observed. Hence, the question may be raised: Are the differences which have been observed between younger and older adults a condition of instruction rather than a function of aging? Thus, if we train the older adult to think in a given manner than we desire, we may eliminate any differences between age groups. This, of course, does not directly help us answer the question of whether or not there are stages of cognitive development. However, the results of this study have encouraged the exploration of the cognitive stage conjecture in demonstrating the effects of specific instruction.

Schaie did not offer empirical studies to support his thesis of cognitive stage development through the adult years. He bases his position on the following line of reasoning: the initial stages of cognitive growth deal with acquisition, but acquisition must have a goal other than itself. Thus, the growth of those cognitive skills in the first twenty years or so of our lives must be followed by other cognitive skills in the application of our knowledge to situations we continue to encounter. Schaie (1977-78) summarized the essence of this thesis:

> For if it be the purpose of the first part of life to acquire the intellectual tools needed to fully participate in the human experience, it then becomes necessary to postulate, if only on teleological grounds, that such preparation must have some further goals. (p. 131)

Schaie posited four major cognitive stages of development. Childhood and adolescence is the stage of acquisition. Young adulthood is characterized by achieving. There are two cognitive stages in the middle years. All individuals go through the responsible stage, but only some go through the other cognitive stage at this period of life. This Schaie named the executive stage. The last stage, which occurs in old age, is the reintegrative stage. However, since my purpose is to document the existence of theories that propose stages of cognitive development throughout the life span, I will not describe in depth the qualities of these four stages.

Schaie is not the first to have proposed such a theory. Neumann (1970), building upon the work of Jung (1934), described two major stages of cognitive development. Analytical psychology posits that cognitive or intellectual development arises from the separation of consciousness from states of unconsciousness. The first stage in this separation is called differentiation. In this stage, individuals develop awareness of themselves and their relations to the world, as the name implies, through differentiating and demarcating. These are cognitive orientations. Ego functions are made use of to work on the task of achieving knowledge about the world through the cognitive orientation of differentiation. A second stage begins in the middle years of adulthood and lasts throughout the rest of adult life. The orientation of this stage is centroversion, a term used to connote an holistic form of synthesis. In this stage, the individual attempts to tie things together, seek relationships between ideas and basic values, and is concerned about how things fit together rather than how things are different. While the first stage operated upon the basis of separating things in the learning to know, this stage is concerned about the relationship of things as the means of knowing. If this theory can be corroborated, we may have an answer to why it takes an older learner more time to respond. The older learner has to differentiate, as does the younger adult, but the former must develop some means of synthesis before he or she can feel comfortable in responding. The younger learner places little or no demand on himself or herself to produce such synthesis. Analytical psychology presents a wide variety of case studeis to support this theory. However, there has been no experimental research to test the theory reported in the literature to this date.

It is strange that the thesis of cognitive stage development during adulthood has not received serious consideration. We have not found it difficult to accept the idea of cognitive stage development during childhood and adolescence. But we apparently have had some difficulty in accepting that there may be further stage developments throughout the life-span. Since the popularization of developmental tasks by Havighurst (1952), most educators have accepted the notion that adult life is characterized by a progressive series of developmental stages. These stages have been conceptualized as social, biological, psychological, and cultural. Cognitive stages of development have not been

an explicit part of the developmental conceptualization of adulthood. It should be noted that at different times throughout an individual's life span, one is confronted by different tasks and a different set of conditions, expectations, and goals. It is difficult to see how all these component elements, which vary from stage to stage, would not in some manner affect the way the individual thinks. Yet, the continuity of cognitive processes is the assumption upon which we have operated. The old man thinks in an identical manner to the young man. When we put the assumption in the form of this bold statement, some of us may have second thoughts before accepting the continuity thesis. It is difficult to ignore the commonly held perception that older people do not see things in the same way younger people do. Obviously, the way we see things reflects the way we think about things. If elements of a problem are combined in different ways, it would seem a logical deduction that cognitive processes must correspondingly differ.

At the same time Havighurst was writing about developmental tasks, the work of Erikson (1950) was beginning to receive attention. In his epigenetic theory of development, Erikson proposed a series of eight critical crises, or ego stages, from birth to death. His psychosocial theory of development provided an account of the ego's development. Although cognitive development as a discrete function of the ego was not explicitly addressed in his work, there is some evidence to support the existence of cognitive stage development within the epigenetic theory. The child moves from a narcissistic (egocentrism) stage, through stages of cooperation and caring, to the final stage of wisdom. Wisdom, for Erikson, is the quality of reintegration, which Schaie described as the basic quality of the final stage of cognitive development.

I believe we are at a stage of our knowledge about human life where a bold integration of a compatible set of powerful theories should be attempted. This proposal has immediate relevancy because the integration of these theories provides the basis for the conceptualization of developmental stages. These stages are differentiated as to how the person thinks and what the person thinks about.

There appear to be three main streams within human life, each having a particular period of ascendency. These dimensions of life have been extensively investigated

and thoughtfully presented in the contribution to three conceptual frameworks. I will speak to each of the three streams and its corresponding conceptual framework. My treatment will be brief as my purpose in introducing it is solely to substantiate the possibility of stages in intellectual development.

The first stream of life has to do with the exploration of the physical world. We come to know the world by touch, taste, sight, and sound, that is, we "feel" ourselves into a knowable existence. Piaget (1953) spoke of the sensorimotor and the concrete phases of life. Erikson talked about modes and zones. Psychoanalytic theory has provided much understanding of this dimension of life. The insights this theory has given to the biological dimension of human life have enabled us to understand the person as a psychosocial organism. Much of the energy and attention during childhood and adolescence is directed at coming to know , and establishing some workable relationships, with the biological dimension of life.

Our senses tell us not only what the world is; they also are the means by which we gain information about the world and develop our basic feelings towards the world and about ourselves. The relationships go beyond touch and manipulation. They also involve basic feelings of good and bad, helpful and harmful, right and wrong.

This biological dimension of psychosocial development continues throughout life; however, from early adulthood its significance declines. A second stream becomes increasingly evident in early adulthood and reaches its ascendency in the late twenties. For some individuals it lasts well into the fifties, but for most it begins its decline in the late forties. The individual's primary relationships to life in this period are framed in confronting and dealing with power. White (1963) spoke of efficacy, while Adler (1946) described this dimension as a basic orientation towards feelings of superiority and inferiority. I believe the term "power" to be a more inclusive label for the qualities included in this second stream of life. There is a sense of power in being competent. Controlling one's life and the conditions which affect it give us a feeling of power. A sense of independence is manifest in this power, just as a sense of dependency characterizes its absence. We either come to demand control or we seek security through dependency.

Fromm's (1941) discussion of our escape from freedom is further documentation of this central and primary dimension of life.

The third stream is the spiritual dimension of life. This stage reaches its ascendency in the late fifties. There is evidence of this dimension in our lives from the late teens onwards. The spiritual stream can be readily distinguished from the other two. The first stream of life is centered around the physical being of the person; the third stream is focused on extending the meaning of the person's immediate existence to more holistic perspectives. The third stream is different from the second in that power is no longer a central and pervasive concern. In the second stream of life, the individual asked: What is it that I want to accomplish? In the third stream, the individual asks: What is the meaning of my accomplishments?

The spiritual dimension may be expressed through religious behaviors, although these two terms are not necessarily synonymous. Spiritual denotes that quality of being which extends the individual beyond his or her immediate preoccupation with self to transactions involving the development of a sense of wholeness with the world.

It seems evident, based only on informal observations, that many people try to avoid getting into this stream of life. But it is equally evident that their vain attempts to hold to the pursuit of power result in tragedy. Macbeth was not the first or last of such tragedies. Other individuals avoid the pains and struggles by seeking a ritualistic dependency on God. In my view, this route escapes the empty victories of power, but it leads to a narrow and restricted understanding of being with and in the world.

These three streams have been proposed as a foundation for a theory of cognitive development.

What implication does the thesis of cognitive stage development have for adult education? Before implications are suggested, we should point out that although there is much evidence which indirectly supports the thesis, the thesis nevertheless must be tested. The conducting of such research studies should be a high priority for adult education. Let us assume, for the present, that there *are* cognitive stages, the three major ones described above.

Educational programs for the elderly should be planned around the theme of helping the older learner to realize more fully his or her spiritual identity. In the case of some older learners, it will be helping them to learn to move from their preoccupation with power to an involvement in the spiritual existence. For those adults already experiencing their spiritual life, adult education should serve to enrich and extend it. The realization of such programs is difficult to achieve because the programs generally are designed by younger adults who are struggling with concerns that have their meaning in the development of competencies and the exercise of power. Few of these adult educators are aware that older adults may have a fundamentally different orientation to life.

This problem is not corrected by asking older adults what they would like to have included in their educational programs. It is very likely that those who were not successful during the middle years of life will ask for projects demanding demonstrable competencies. Whether such projects are helpful or not can only be judged on the criterion that these activities have made possible the obtainment of the last stage. It is not sufficient for these learners simply to prove that they can be competent. To learn how to refinish furniture is not the goal but only the means to the goal.

For those who were successful during the years of achievement and responsibility, the adult educator may make a similar type of mistake. The adult educator may believe his or her job well done when he or she meets the request for a class in oil painting. The learners are being helped to develop skills in oil painting, and everyone appears to be enjoying the activity. The joy does not lie alone in the mastering of an expressive form but in the application of a previously unexplored medium that illustrates another form of unity of life. The learner may not be conscious of this insight; nevertheless, its existence can be readily tested by exploring the learner's perceptions. The relationship of the learner to the flowers in the still life is more than the sense of having achieved a level of skill. The flowers manifest the beauty that lies within and that must now be expressed as a completion of a cycle.

The conclusion is not that adult educators stop offering the regular array of programs, but that they take into

account the meaning these activities have for the participating adult.

What has been said about programming applies equally to the manner in which instruction is handled. The mastering of skills unquestionably has a place in adult education for the older learner, but it does not have the same meaning as it has for the younger adult. The emphasis is not on the power it gives, that is, the sense of accomplishment over another aspect of life but rather on the expression of another mode of relating self to the unity of life. The instructor helps the older learner to bring out the fullness of the rose in the still life painting as a means of helping the individual tie his or her own life to the existence of life as a whole. It is not that the rose is realistic so much as it expresses the individual's link to the world. These are the roses he or she has known in life, and both are tied together by the perceptions developed over a lifetime. Through skills in using oils, that individual has made concrete the feelings he or she has had towards roses. The painting is a visible symbol for the older learner to the unity with life that he or she is struggling to reveal. A poor painting is unacceptable not because it demonstrates lack of skills, but because it fails to symbolize correctly the unity he or she is trying to express.

It goes without saying that the younger instructor cannot go all the way with the older learner. The instructor can help in providing the tools and the information, but it is up to the older learner to carry on the integration. Older learners may be able to help each other. The instructor, indeed, should encourage interactions within the group.

Wisdom is dependent on integration and synthesis. These two processes can be fostered by instructors who listen carefully, are aware of the psychosocial concerns, and are open, honest, and accepting. I am well aware that these qualities have been proposed before. There is one major difference. What we have proposed here is an awareness of psychosocial concerns related to cognitive stage development.

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